Service Manual

PIONEER
The Art of Entertainment

PION - 04806

ORDER NO.
RRV1290

AUDIO/VIDEO STEREO RECEIVER

VSX-604S

● Refer to the service manual RRV1248 for VSX－504S/KUXJ.

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	The voltage can be converted by the following method.
	VSX－604S		
KUXJ	○	AC120V	———
KCXJ	○	AC120V	———
SDXJ	○	AC110V/120－127V/220V/240V	With the voltage selector

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1. CONTRAST OF MISCELLANEOUS PARTS

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω → 56 × 10^1 → 561 .... RD1/8PM $\boxed{5}\boxed{6}\boxed{1}$ J
47kΩ → 47 × 10^3 → 473 .... RD1/4PS $\boxed{4}\boxed{7}\boxed{3}$ J
0.5Ω → 0R5 .... RN2H $\boxed{0}\boxed{R}\boxed{5}$ K
1Ω → 010 .... RS1P $\boxed{0}\boxed{1}\boxed{0}$ K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ → 562 × 10^1 → 5621 .... RM1/4PC $\boxed{5}\boxed{6}\boxed{2}\boxed{1}$ F

VSX−604S/KUXJ, KCXJ, SDXJ and VSX−504S/KUXJ have the same construction except for the following:

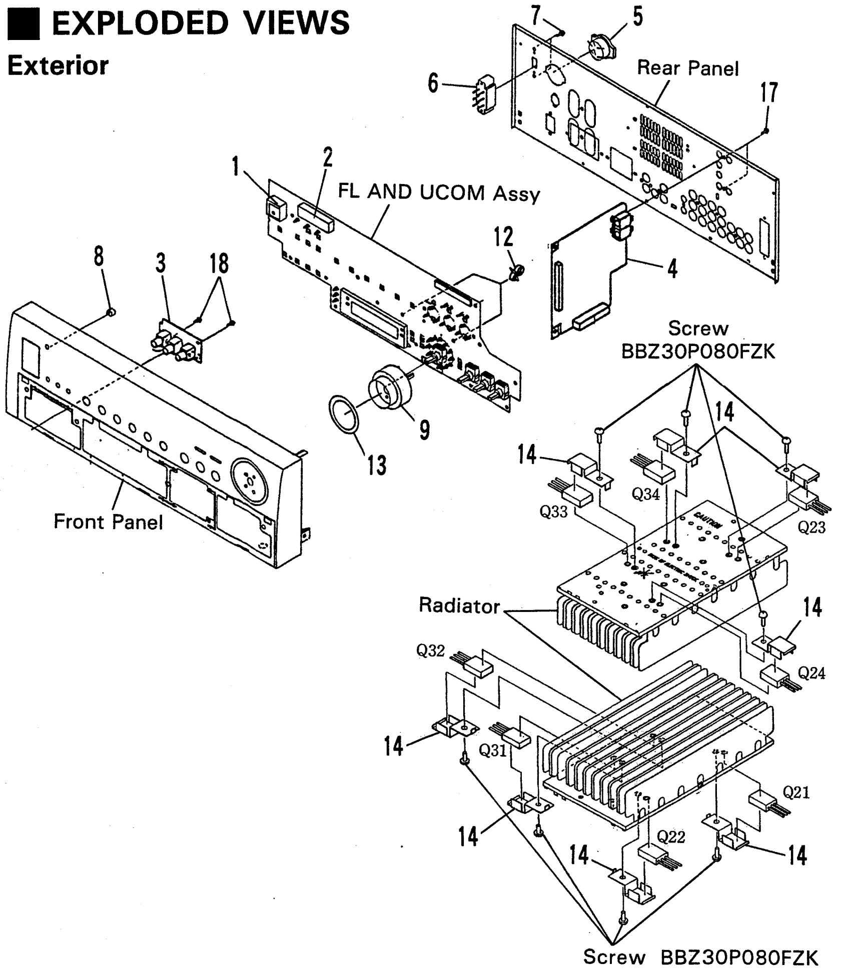
Mark	Symbol & Description	Part No.				Remarks
		VSX−504S/ KUXJ	VSX−604S/ KUXJ	VSX−604S/ KCXJ	VSX−604S/ SDXJ	
NSP	MOTHER assy	AWK7124	AWK7121	AWK7121	AWK7123	
	PS AND FUNC assy	AWZ7597	AWZ7589	AWZ7589	AWZ7596	
	REG. assy	AWZ7592	AWZ7718	AWZ7718	AWZ7718	
NSP	FL AND AMP assy	AWK7125	AWK7122	AWK7122	AWK7190	
	FL AND UCOM assy	AWZ7599	AWZ7593	AWZ7593	AWZ7760	
	└IR RECEIVER assy	Not used	AWX7012	AWX7012	AWX7012	
	├PHOTO DIODE assy	Not used	AWZ7657	AWZ7657	AWZ7657	*1, No. 1
	└RF AMP assy	Not used	AWZ7658	AWZ7658	AWZ7658	*1, No. 2
	FRONT AV assy	Not used	AWZ7595	AWZ7595	AWZ7595	*1, No. 3
	GUI AND UCOM assy	Not used	AWQ7001	AWQ7001	AWQ7005	*1, No. 4
⚠	Q21, Q22, Q31, Q32 Transistor	2SC4793	2SC5174P	2SC5174P	2SC5174P	
⚠	Q23, Q24, Q33, Q34 Transistor	2SA1837	2SA1932P	2SA1932P	2SA1932P	
⚠	S1 Voltage selector (AC110V/120−127V/220V/240V)	Not used	Not used	Not used	AKX−507	*1, No. 5
⚠	S2 Voltage selector (AC110−127V/220−240V)	Not used	Not used	Not used	AKX1004	*1, No. 6
⚠	T1 Power transformer (AC120V)	ATS7049	ATS7049	ATS7049	Not used	
⚠	T1 Power transformer (AC110V/120−127V/220V/240V)	Not used	Not used	Not used	ATS7051	
⚠	FU1 Fuse (10A)	REK1087	REK1087	REK1087	Not used	
⚠	FU1, FU2 Fuse (5A)	Not used	Not used	Not used	REK1083	
⚠	AC power cord	PDG1015	PDG1015	PDG1015	ADG1157	
	Cord stopper	AEP−113	AEP−113	AEP−113	AEC−882	
	Screw	Not used	Not used	Not used	BBZ30P080FZK	*1, No. 7
	LED lens	Not used	Not used	Not used	PNW2019	*1, No. 8
	FL panel	AAK7125	AAK7124	AAK7124	AAK7124	
	Jog ring	AAK7129	Not used	Not used	Not used	
	G. U. I. lens	Not used	AAK7128	AAK7128	AAK7128	*1, No. 9
	Sub panel	AAP7011	AAP7010	AAP7010	AAP7010	
	Mini repeater	Not used	ADF1002	ADF1002	ADF1002	*1, No. 10
	Main repeater	Not used	AXF1079	AXF1079	AXF1079	*1, No. 11
	Cable holder	Not used	AEC7019	AEC7019	AEC7019	*1, No. 12
	PVC sheet	Not used	AEC7035	AEC7035	AEC7035	*1, No. 13

Mark	Symbol & Description	Part No.				Remarks
		VSX−504S/ KUXJ	VSX−604S/ KUXJ	VSX−604S/ KCXJ	VSX−604S/ SDXJ	
	Driver holder	Not used	ANG7031	ANG7031	ANG7031	∗1, No. 14
	Front panel	AMB7177	AMB7175	AMB7175	AMB7200	
	Insulator assy (for Front)	DXA1490	Not used	Not used	Not used	
	Insulator (for Rear)	PNW1912	Not used	Not used	Not used	
	Leg assy (for Front)	Not used	AMR2633	AMR2633	AMR2633	∗1, No. 15
	Leg assy (for Rear)	Not used	AMR2634	AMR2634	AMR2634	∗1, No. 16
	Screw	Not used	BBZ30P080FZK	BBZ30P080FZK	BBZ30P080FZK	∗1, No. 17
	Screw	Not used	BPZ26P080FMC	BPZ26P080FMC	BPZ26P080FMC	∗1, No. 18
	Rear panel	ANC7172	ANC7170	ANC7170	ANC7171	
	Remote control unit (CU−VSX095)	AXD7045	Not used	Not used	Not used	
	Remote control unit (CU−VSX096)	Not used	AXD7044	AXD7044	AXD7044	
NSP	Battery (LR03, AAA)	AEX1006	Not used	Not used	Not used	
NSP	Battery (R6P, AA)	Not used	VEM−013	VEM−013	VEM−013	
	Battery cover	Not used	AZN7187	AZN7187	AZN7187	
	Packing case	AHD7110	AHD7107	AHD7107	AHD7109	
	Operating instructions (English)	ARB7023	ARB7022	ARB7022	ARB7022	
	Operating instructions (French)	Not used	Not used	ARC7033	Not used	
	Operating instructions (Chinese/Spanish)	Not used	Not used	Not used	ARC7034	

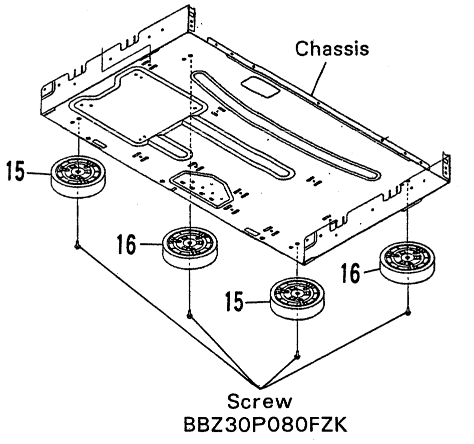
∗1: The numbers in the remarks column correspond to the numbers on the exploded views.

■ EXPLODED VIEWS

Exterior

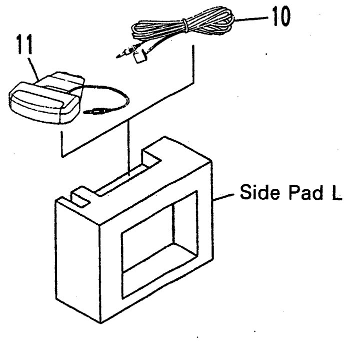


7
5
Rear Panel
6
17
1
2
FL AND UCOM Assy
12
4
8
3
18
Screw
BBZ30P080FZK
9
13
14
14
Q34
Q33
Q23
Front Panel
Radiator
14
Q32
Q24
14
Q31
Q21
14
Q22
14
14
Screw BBZ30P080FZK



Chassis
15
16
16
15
Screw
BBZ30P080FZK

Packing



10
11
Side Pad L

CONTRAST OF PCB ASSEMBLIES

PS AND FUNC Assy

AWZ7589, AWZ7596 and AWZ7597 have the same construction except for the following:

Mark	Symbol & Description	Part No.			Remarks
		AWZ7597	AWZ7589	AWZ7596	
	IC705	Not used	NJM78M56FAS	NJM78M56FAS	
	Q470	2SA933S	Not used	Not used	
	Q471	DTC124ES	Not used	Not used	
	Q484	Not used	2SC4793	2SC4793	*
	Q803	Not used	2SC1740S	2SC1740S	*
	D413, D414	Not used	1SS252	1SS252	*
	D419	MTZJ5.6A	Not used	Not used	
	D470, D472–D474	1SS252	Not used	Not used	
	D496	Not used	MTZJ13A	MTZJ13A	*
	S801	Not used	Not used	ASH1027	*
	T401	ATT1223	ATT7006	ATT7007	
	C409	Not used	CEAS470M50	CEAS470M50	*
	C411	Not used	CKCYX104M25	CKCYX104M25	*
	C412	CEAS470M25	Not used	Not used	
	C415	CEAS102M25	CEHAQ102M25	CEHAQ102M25	
	C422 (0.022μF/AC400V)	ACG1030	ACG1030	Not used	
	C422 (0.1μF/AC250V)	Not used	Not used	ACE–507	
	C423	Not used	Not used	CKPUYB102K50	*
	C807	Not used	CEAS101M25	CEAS101M25	*
	C808	Not used	CKCYF473Z50	CKCYF473Z50	*
	C813	Not used	CEAS4R7M50	CEAS4R7M50	*
	R433	RS2LMF151J	Not used	Not used	
	R434	Not used	RD1/8PM221J	RD1/8PM221J	*
	R439	RD1/2PM470J	RD1/2PM220J	RD1/2PM220J	
	R444	Not used	RD1/2PM100J	RD1/2PM100J	*
	R445	Not used	RS3LMF221J	RS3LMF221J	*
	R470, R471	RD1/8PM224J	Not used	Not used	
	R472	RD1/8PM562J	Not used	Not used	
	R473	RD1/8PM103J	Not used	Not used	
	R474	RD1/8PM102J	Not used	Not used	
	R495	Not used	RD1/2PMF820J	RD1/2PMF820J	*
	R497	Not used	RS2LMF820J	RS2LMF820J	*
	R441 (2.2MΩ, 1/2W)	ACN–208	ACN–208	Not used	
	R808	Not used	RD1/2PM271J	RD1/2PM271J	*
	R811	Not used	RD1/8PM151J	RD1/8PM151J	*
	R1812, R1827	RD1/8PM392J	RD1/8PM472J	RD1/8PM472J	
	CN403	Not used	Not used	AKC1016	*
	CN407 Jack	AKN1006	Not used	Not used	
	CN412	Not used	KM250MA5	KM250MA5	*
	CN804	Not used	53290–0910	53290–0910	*

*Note *: Refer to "3.2 PS AND FUNC ASSY (1/2)".*

REG. Assy

AWZ7718 and AWZ7592 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ7592	AWZ7718	
	R430	RS2LMF821J	Not used	
	R430 (150Ω)	Not used	ACN7002	

FL AND UCOM Assy

AWZ7593, AWZ7760 and AWZ7599 have the same construction except for the following:

Mark	Symbol & Description	Part No.			Remarks
		AWZ7599	AWZ7593	AWZ7760	
	IC902	PDG133A	PDG134A	PDG134A	
	IC2101	Not used	M5218AP	M5218AP	*
	IC2102	Not used	TC74HC02AF	TC74HC02AF	*
	IC2103	Not used	M5223P	M5223P	*
	Q901	Not used	Not used	DTA124ES	*
	Q902, Q903	2SC1740S	Not used	Not used	
	Q911	Not used	2SA1145	2SA1145	*
	Q912, Q955	Not used	DTC124ES	DTC124ES	*
	Q956, Q2101, Q2103, Q2132	Not used	2SC1740S	2SC1740S	*
	Q2104, Q2133	Not used	DTA124ES	DTA124ES	*
	Q2106	Not used	DTC143ES	DTC143ES	*
	Q2131	Not used	2SA933S	2SA933S	*
	D901	Not used	Not used	AEL1099	*
	D902	1SS252	Not used	Not used	
	D937–D944	Not used	AEL1122	AEL1122	*
	D951, D952, D955, D960, D2101–D2103, D2131–D2133	Not used	1SS252	1SS252	*
	D961	Not used	MTZJ8.2	MTZJ8.2	*
	S906, S927, S930	Not used	ASG1034	ASG1034	*
	S907–S909	ASG1034	Not used	Not used	
	L2101	Not used	LAU221K	LAU221K	*
	C902	CKCYX103M25	Not used	Not used	
	C912	Not used	CKPUYF473Z16	CKPUYF473Z16	*
	C913	Not used	Not used	CKPUYB102K50	*
	C2101	Not used	CKPUYF103Z25	CKPUYF103Z25	*
	C2102	Not used	CEJA221M6	CEJA221M6	*
	C2103	Not used	CEAS100M50	CEAS100M50	*
	C2104	CEAS221M10	Not used	Not used	
	C2131	Not used	CEAS4R7M50	CEAS4R7M50	*
	C2132, C2134	Not used	CKCYF103Z50	CKCYF103Z50	*
	C2135	Not used	CKCYX104M25	CKCYX104M25	*
	C2133	Not used	CFTXA103J50	CFTXA103J50	*
	R901	Not used	Not used	RD1/8PM271J	*
	R902, R905	RD1/8PM101J	Not used	Not used	
	R903, R942, R943	RD1/8PM103J	Not used	Not used	
	R904	RD1/8PM562J	Not used	Not used	
	R937, R2111, R2131, R2136, R2137, R2142	Not used	RD1/8PM103J	RD1/8PM103J	*
	R947	Not used	Not used	RD1/8PM223J	*
	R948	Not used	RD1/8PM473J	RD1/8PM473J	*
	R976–R978, R2107	Not used	RD1/8PM472J	RD1/8PM472J	*
	R996	Not used	RD1/8PM270J	RD1/8PM270J	*
	R998, R2113	Not used	RD1/8PM223J	RD1/8PM223J	*
	R2101	Not used	RD1/8PM563J	RD1/8PM563J	*
	R2102, R2103, R2106, R2108, R2112, R2135, R2139, R2143	Not used	RD1/8PM222J	RD1/8PM222J	*
	R2104	Not used	RD1/8PM753J	RD1/8PM753J	*
	R2105, R2114, R2134, R2140	Not used	RD1/8PM102J	RD1/8PM102J	*
	R2118	Not used	RD1/8PM562J	RD1/8PM562J	*
	R2121	Not used	RD1/8PM470J	RD1/8PM470J	*
	R2132, R2133, R2141	Not used	RD1/8PM104J	RD1/8PM104J	*
	R2138	Not used	RD1/8PM332J	RD1/8PM332J	*
	R2144	Not used	RD1/8PM392J	RD1/8PM392J	*
	Remote receiver unit	AXX1023	Not used	Not used	

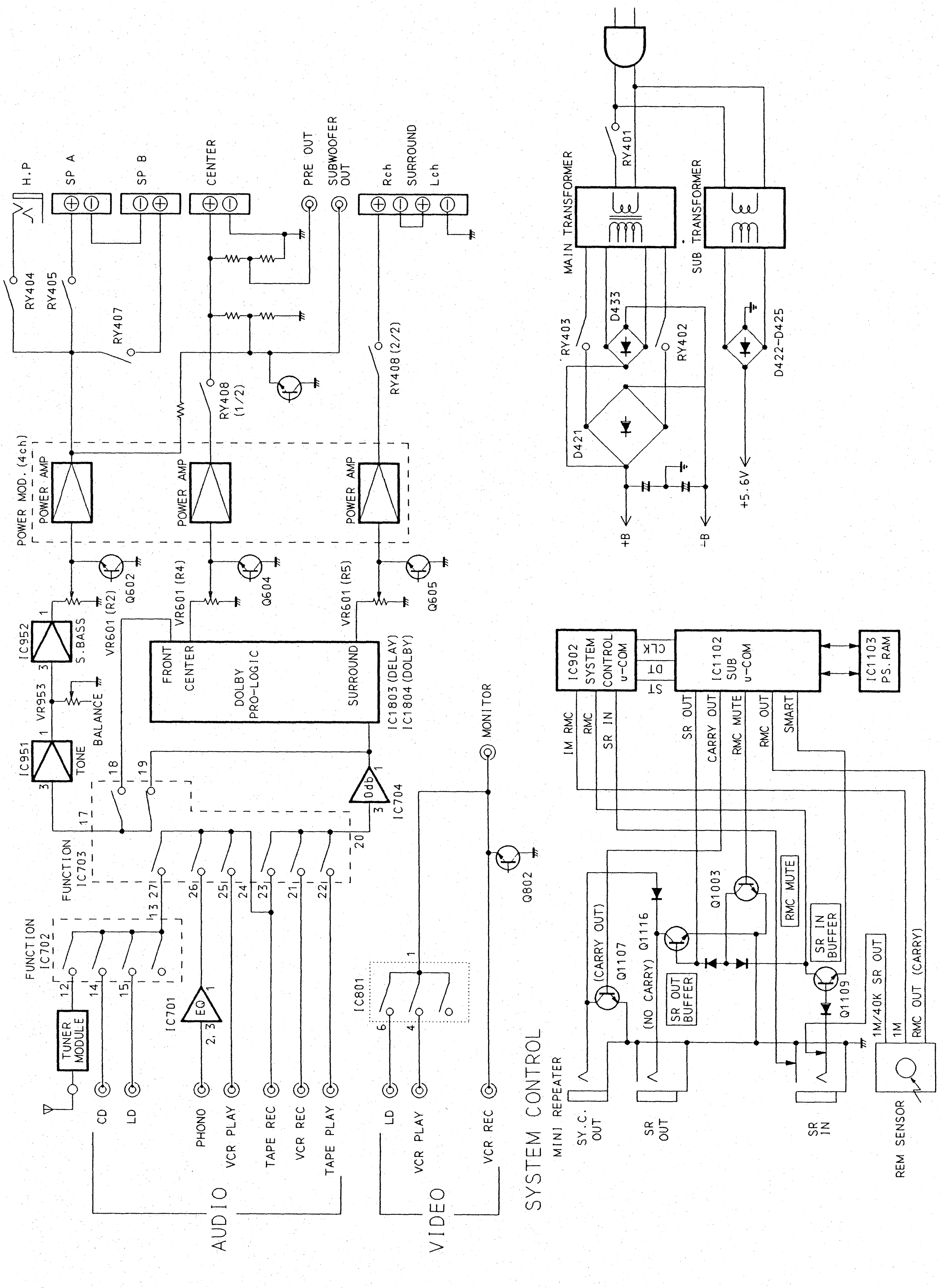
*Note *: Refer to "3.3 FL AND UCOM ASSY".*

PCB PARTS LIST

Mark	No.	Description	Parts No.
	PHOTO DIODE ASSY		
	SEMICONDUCTORS		
	IC2602		PD410PI
	IC2601		PFC502
	IC2603		SBX8025−H
	Q2602		2SC2712
	Q2601		2SK302
	COILS AND FILTERS		
	L2601		LAU221K
	CAPACITORS		
	C2602		CCSQCH181J50
	C2604		CCSQCH820J50
	C2607		CEAL470M6R3
	C2605		CKSQYB103K50
	C2603		CKSQYB473K50
	C2601, C2606		CKSQYF104Z25
	RESISTORS		
	All Resistors		RS1/10S□□□J
	OTHERS		
		LED HOLDER (PLS)	AMR7040
	RF AMP ASSY		
	SEMICONDUCTORS		
	IC2501		CXA1600P
	IC2502, IC2504		TC7SU04F
	D2501, D2502, D2503		1SS352
	COILS AND FILTERS		
	L2501, L2502		LAU221K
	CAPACITORS		
	TC2501		ACM7001
	C2520		CCSQCH150J50
	C2514		CCSQCH681J50
	C2501		CEAL100M6R3
	C2508		CEAL101M6R3
	C2503		CEAL2R2M35
	C2504		CEALR10M50
	C2507		CKSQYB103K50
	C2513		CKSQYB104K25
	C2502, C2506		CKSQYB473K50
	RESISTORS		
	All Resistors		RS1/10S□□□J
	OTHERS		
	X2501	CERAMIC RESONATOR	ASS7005
	FRONT AV ASSY		
	CAPACITORS		
	C991, C992		CKCYX473M25
	RESISTORS		
	All Resistors		RD1/8PM□□□J
	OTHERS		
		PIN JACK (1P)	AKB7011
	CN992	PLUG 5−P	KM250MA5

Mark	No.	Description	Parts No.
	GUI AND UCOM ASSY		
	SEMICONDUCTORS		
	IC1103		LH5268AN1TLL
	IC1105		MM1067XD
	IC1106		NJM78L05A
	IC1102		PD5320A
	IC1104		PD6157A
	IC1101		TC74HC123AF
	Q1110		2SA1515
	Q1109		2SA933S
	Q1101, Q1102, Q1104, Q1107, Q1111		2SC1740S
	Q1106		XDC124ES
	Q1103		XDC143ES
	D1101, D1103−D1109, D1111		1SS252
	D1114−D1118		1SS252
	D1102		MTZJ2.7
	SWITCHES AND RELAYS		
	S1101	(SD type only)	ASH1027
	COILS AND FILTERS		
	L1101, L1102		LAU220J
	CAPACITORS		
	C1126		ACH7013
	TC1101		ACM−023
	C1123, C1124		CCCCH150J50
	C1111		CCCCH221J50
	C1125		CCCCH330J50
	C1106, C1108		CEAS010M50
	C1103		CEAS100M50
	C1114, C1118, C1130		CEAS101M10
	C1115, C1116, C1120, C1127		CEAS470M25
	C1113		CEASR47M50
	C1101, C1112		CKCYB102K50
	C1131		CKCYB331K50
	C1109		CKCYB332K50
	C1110		CKCYB471K50
	C1107		CKCYB561K50
	C1104, C1117, C1119, C1121, C1122		CKCYF103Z50
	C1105, C1128, C1129		CKCYF473Z50
	C1132		CKPUYB101K50
	RESISTORS		
	R1118		RD1/4PM680J
	Other Resistors		RD1/8PM□□□J
	OTHERS		
	CN1184	9P SOCKET	52418−0910
		JACK	AKN−209
		JACK	AKN7003
	X1102	CERAMIC RESONATOR	ASS1025
	X1103	CRYSTAL RESONATOR	ASS1056
	X1101	CERAMIC RESONATOR	ASS1112
		JACK1102	BKN1005
	CN1196	CONNECTOR (3P)	KPE3
	CN1194, CN1195	CONNECTOR (8P)	KPE8

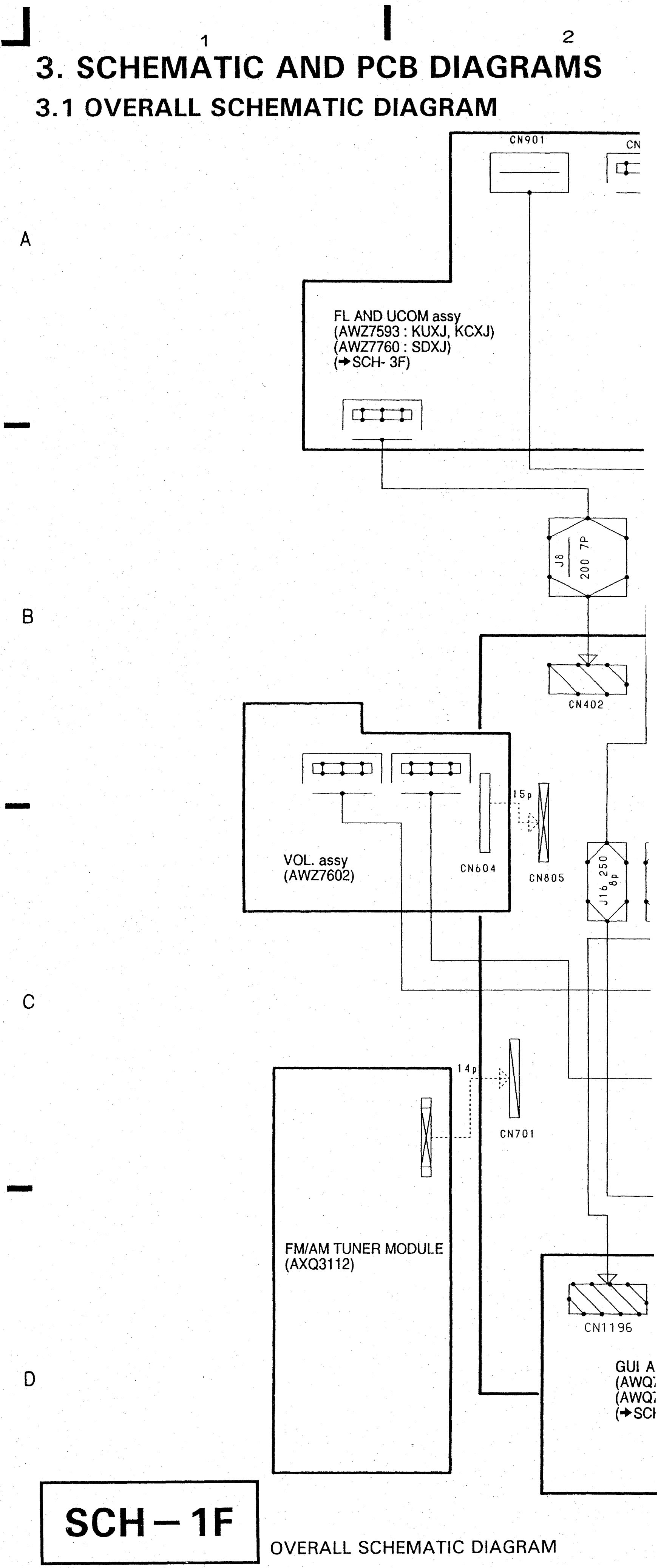
2. BLOCK DIAGRAM



H.P
SP A
SP B
CENTER
PRE OUT
SUBWOOFER OUT
Rch
SURROUND
Lch
RY404
RY405
RY407
RY408 (1/2)
RY408 (2/2)
POWER MOD. (4ch)
POWER AMP
POWER AMP
POWER AMP
Q602
Q604
Q605
VR601 (R2)
VR601 (R4)
VR601 (R5)
IC952
S.BASS
VR953
BALANCE
IC951
TONE
FRONT
CENTER
DOLBY
PRO-LOGIC
SURROUND
IC1803 (DELAY)
IC1804 (DOLBY)
0db
IC704
FUNCTION
IC703
FUNCTION
IC702
TUNER MODULE
IC701
EQ
CD
LD
PHONO
VCR PLAY
TAPE REC
VCR REC
TAPE PLAY
AUDIO
IC801
MONITOR
Q802
LD
VCR PLAY
VCR REC
VIDEO
MAIN TRANSFORMER
SUB TRANSFORMER
RY401
RY403
RY402
D433
D421
D422-D425
+B
-B
+5.6V
IC902
SYSTEM CONTROL
u-COM
CLK
DT
ST
IC1102
SUB
u-COM
IC1103
PS. RAM
IM RMC
RMC
SR IN
SR OUT
CARRY OUT
RMC MUTE
RMC OUT
SMART
Q1107
(CARRY OUT)
Q1116
(NO CARRY)
SR OUT BUFFER
Q1003
RMC MUTE
SR IN BUFFER
Q1109
SR OUT
1M/40K
1M
RMC OUT (CARRY)
SYSTEM CONTROL
MINI REPEATER
SY.C. OUT
SR OUT
SR IN
REM SENSOR

3. SCHEMATIC AND PCB DIAGRAMS

3.1 OVERALL SCHEMATIC DIAGRAM

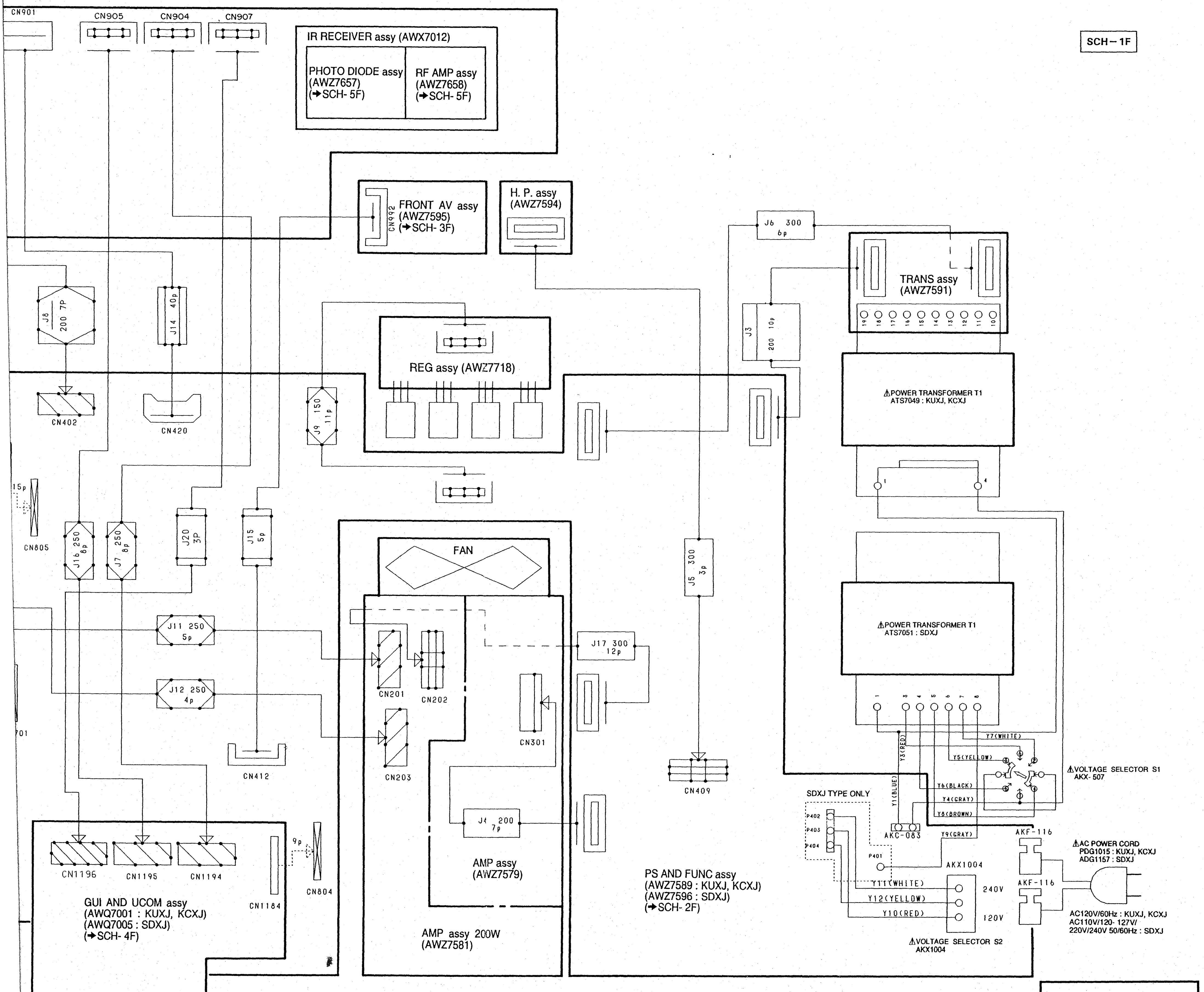


1
2
A
B
C
D
CN901
CN
FL AND UCOM assy
(AWZ7593 : KUXJ, KCXJ)
(AWZ7760 : SDXJ)
(➔SCH- 3F)
J6
200 7P
CN402
VOL. assy
(AWZ7602)
CN604
15p
CN805
J16 250 8p
14p
CN701
FM/AM TUNER MODULE
(AXQ3112)
CN1196
GUI A
(AWQ
(AWQ
(➔SC

SCH－1F

OVERALL SCHEMATIC DIAGRAM

GRAMS

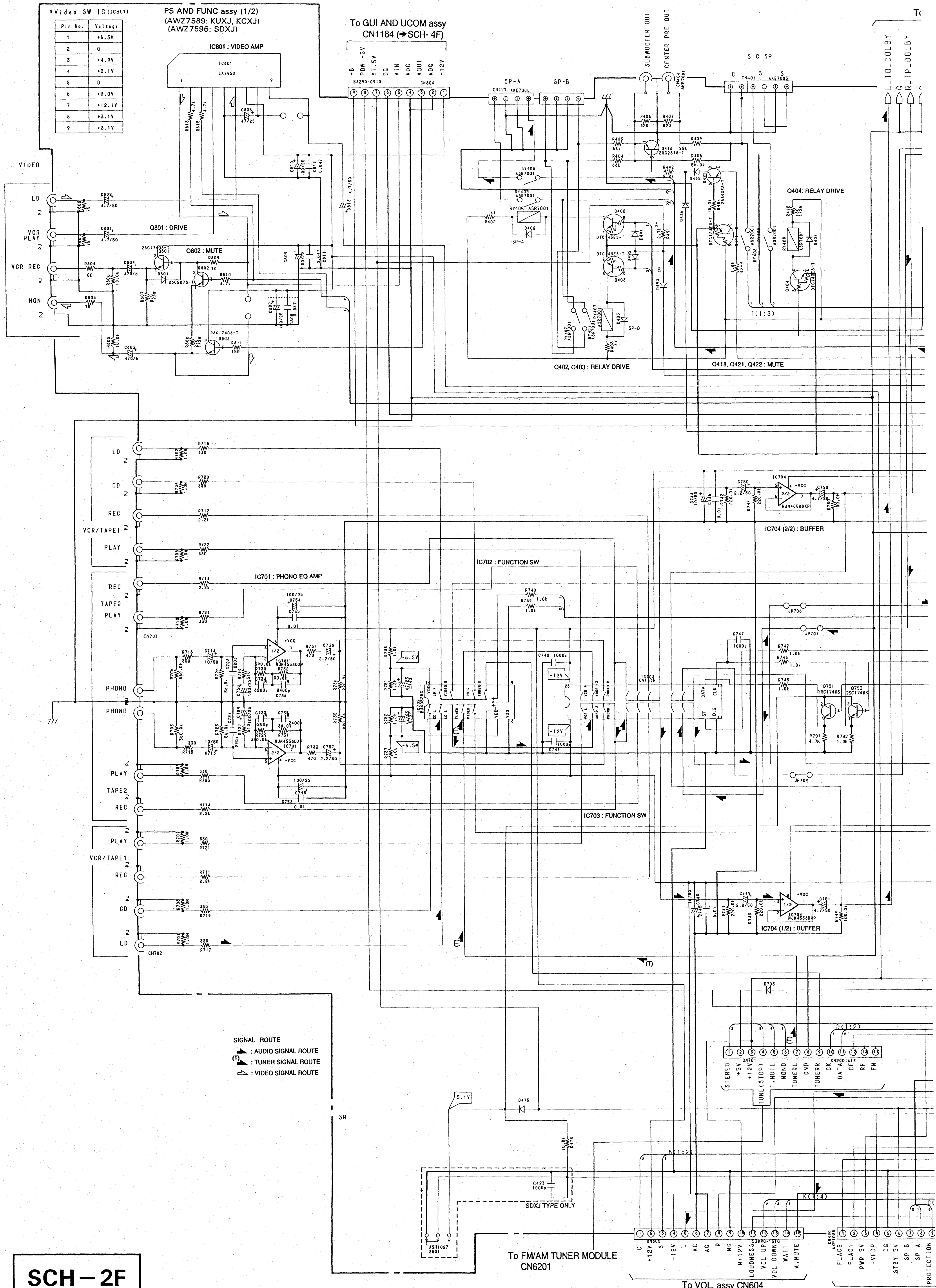

SCH－1F
A
B
C
D
CN901
CN905
CN904
CN907
IR RECEIVER assy (AWX7012)
PHOTO DIODE assy
(AWZ7657)
(➔SCH- 5F)
RF AMP assy
(AWZ7658)
(➔SCH- 5F)
FRONT AV assy
(AWZ7595)
(➔SCH- 3F)
CN992
H. P. assy
(AWZ7594)
J6 300 6p
TRANS assy
(AWZ7591)
19 18 17 16 15 14 13 12 11 10
J8 200 7P
J14 40p
REG assy (AWZ7718)
J3 200 10p
⚠POWER TRANSFORMER T1
ATS7049 : KUXJ, KCXJ
CN402
CN420
J9 150 11p
15p
CN805
J16 250 8p
J7 250 8p
J20 3P
J15 5p
FAN
J5 300 3p
⚠POWER TRANSFORMER T1
ATS7051 : SDXJ
J11 250 5p
J12 250 4p
J17 300 12p
CN201
CN202
CN301
CN203
CN412
CN409
1 3 4 5 6 7 8
Y7(WHITE)
Y3(RED)
Y5(YELLOW)
Y6(BLACK)
Y4(GRAY)
Y8(BROWN)
Y1(BLUE)
Y9(GRAY)
⚠VOLTAGE SELECTOR S1
AKX- 507
SDXJ TYPE ONLY
P402
P403
P404
P401
AKC-083
AKX1004
AKF-116
AKF-116
⚠AC POWER CORD
PDG1015 : KUXJ, KCXJ
ADG1157 : SDXJ
Y11(WHITE)
Y12(YELLOW)
Y10(RED)
240V
120V
AC120V/60Hz : KUXJ, KCXJ
AC110V/120- 127V/
220V/240V 50/60Hz : SDXJ
⚠VOLTAGE SELECTOR S2
AKX1004
J4 200 7p
AMP assy
(AWZ7579)
AMP assy 200W
(AWZ7581)
PS AND FUNC assy
(AWZ7589 : KUXJ, KCXJ)
(AWZ7596 : SDXJ)
(➔SCH- 2F)
9p
CN1196
CN1195
CN1194
CN804
CN1184
701
GUI AND UCOM assy
(AWQ7001 : KUXJ, KCXJ)
(AWQ7005 : SDXJ)
(➔SCH- 4F)

3.2 PS AND FUNC ASSY (1/2)

*Video SW IC (IC801)

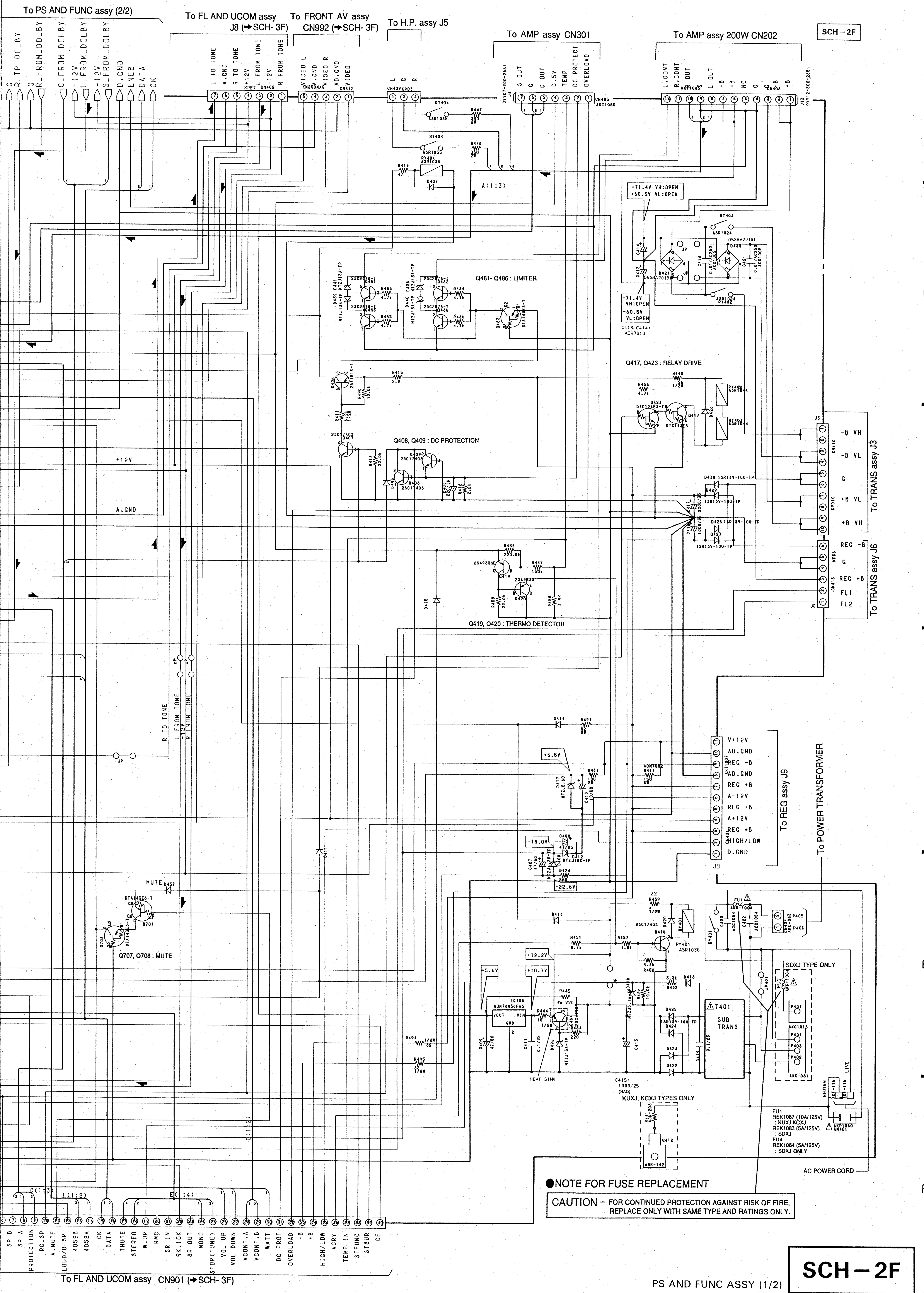
Pin No.	Voltage
1	+6.3V
2	0
3	+4.9V
4	+3.1V
5	0
6	+3.0V
7	+12.1V
8	+3.1V
9	+3.1V

PS AND FUNC assy (1/2)
(AWZ7589: KUXJ, KCXJ)
(AWZ7596: SDXJ)


IC801 : VIDEO AMP
IC801
LA7952
To GUI AND UCOM assy
CN1184 (➔SCH- 4F)
+B
POW +5V
ST.5V
DC
VIN
ADC
VOUT
ADC
+12V
CN804
SP-A
SP-B
CN421
SUBWOOFER OUT
CENTER PRE OUT
S C SP
CN401
L_TO_DOLBY
R_TP_DOLBY
VIDEO
LD
VCR PLAY
VCR REC
MON
Q801 : DRIVE
Q802 : MUTE
Q404: RELAY DRIVE
Q402, Q403 : RELAY DRIVE
Q418, Q421, Q422 : MUTE
LD
CD
REC
VCR/TAPE1
PLAY
REC
TAPE2
PLAY
PHONO
PHONO
PLAY
TAPE2
REC
PLAY
VCR/TAPE1
REC
CD
LD
CN703
CN702
IC701 : PHONO EQ AMP
IC702 : FUNCTION SW
IC703 : FUNCTION SW
IC704 (2/2) : BUFFER
IC704 (1/2) : BUFFER
NJM4558DXP
JP706
JP707
JP709
Q791 2SC1740S
Q792 2SC1740S
SIGNAL ROUTE
: AUDIO SIGNAL ROUTE
: TUNER SIGNAL ROUTE
: VIDEO SIGNAL ROUTE
SR
5.1V
D475
C423 1000p
SDXJ TYPE ONLY
CN701
STEREO
+5V
+12V
T.MUTE
MONO
TUNERL
GND
TUNERR
CK
DATA
CE
RF
FM
TUNE(STOP)
To FM/AM TUNER MODULE
CN6201
CN605
C
+12V
S
-12V
L
AG
AG
R
MG
M+12V
LOUDNESS
VOL UP
VOL DOWN
WATT
A.MUTE
To VOL. assy CN604
CN420
FLAC2
FLAC1
PWR 5V
-VFDP
DC
STBY 5V
SP B
SP A
PROTECTION

SCH−2F

PS AND FUNC ASSY (1/2)

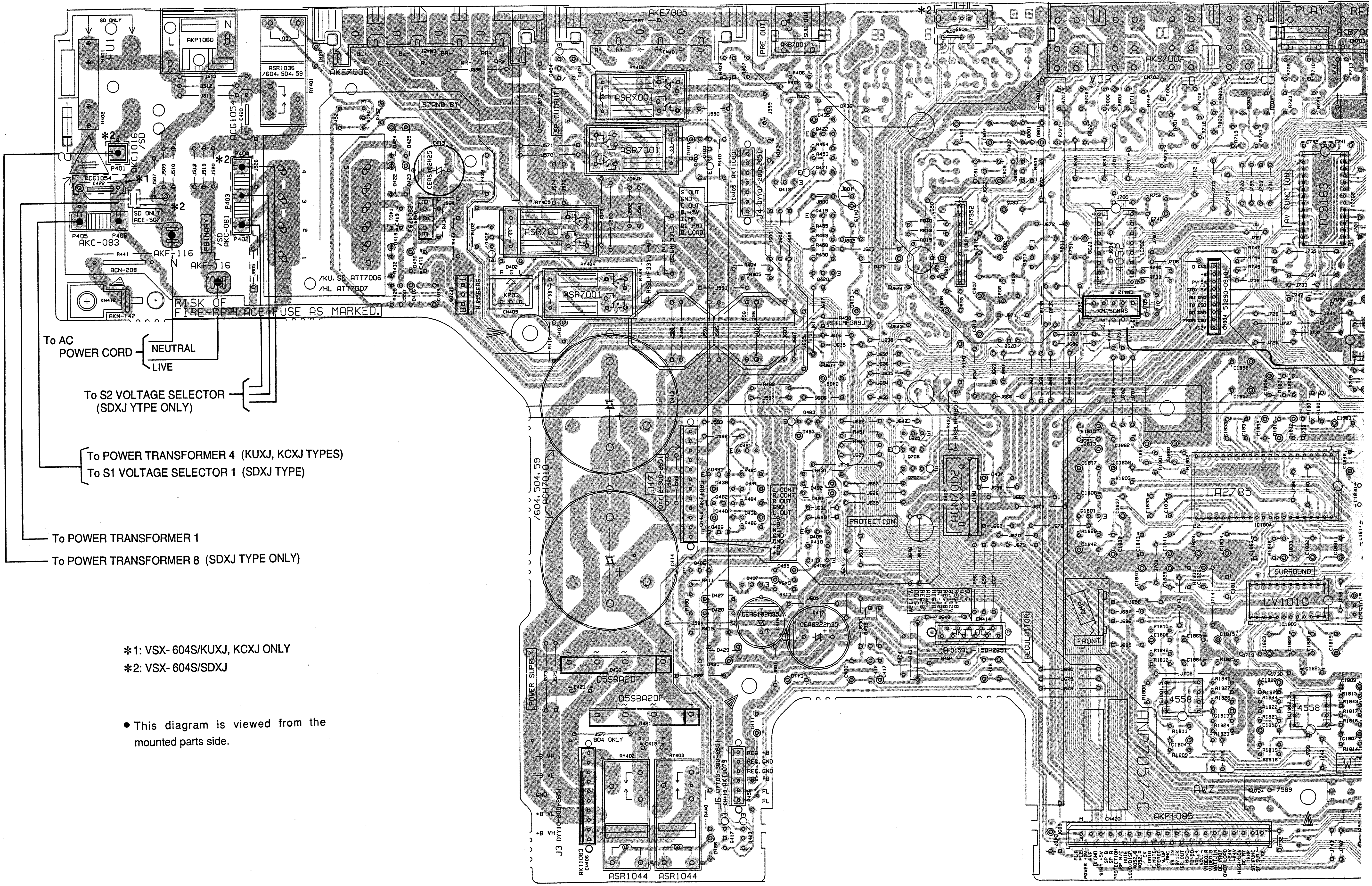

To PS AND FUNC assy (2/2)
To FL AND UCOM assy J8 (➔SCH- 3F)
To FRONT AV assy CN992 (➔SCH- 3F)
To H.P. assy J5
To AMP assy CN301
To AMP assy 200W CN202
G
R_TP_DOLBY
G
R_FROM_DOLBY
C_FROM_DOLBY
-12V
L_FROM_DOLBY
+12V
S_FROM_DOLBY
D.GND
ENEB
DATA
CK
L TO TONE
A.GND
R TO TONE
+12V
L FROM TONE
-12V
R FROM TONE
KPE7 CN402
VIDEO L
V.GND
VIDEO R
AD.GND
VIDEO
KM250NA5 CN412
L G R
CN409 KPD3
S OUT
G
C OUT
D.5V
TEMP
DC PROTECT
OVERLOAD
CN405 AKT1080
L.CONT
R.CONT
R OUT
G
L OUT
-B
-B
NC
G
G
+B
RY404 ASR1035
R447 330 2W
R448 330 2W
R416 47
D407
A(1:3)
+71.4V VH:OPEN
+60.5V VL:OPEN
-71.4V VH:OPEN
-60.5V VL:OPEN
C413, C414: ACH7010
RY403 ASR1024
D5SBA20 (B)
D433
D421
RY402 ASR1024
Q481- Q486 : LIMITER
2SC2674-T Q481
2SC2674-T Q482
2SC2674-T Q485
2SC2674-T Q486
MTZJ13A-TP
D439 D441 D438 D440
R483 4.7k
R484 4.7k
R485 4.7k
R486 4.7k
DTA143E3-T
Q463
Q417, Q423 : RELAY DRIVE
R440 33 1/2W
R456 4.7k
Q423 DTC124ES-TE
Q417 DTC143ES
D426
RY408 ASR1044
RY405 ASR1044
2SA1515-T Q406
R415 2.2
R410 100k
R411 1/2W
2SC17403 Q407
Q408, Q409 : DC PROTECTION
Q409 2SC17403
Q408 2SC17403
R413 22.0k
R418 2.2k
+12V
A.GND
D430 1SR139-100-TP
D429 1SR139-100-TP
D428 1SR139-100-TP
D427 1SR139-100-TP
J3
-B VH
-B VL
G
+B VL
+B VH
CN410 KPD10
To TRANS assy J3
REG -B
G
REG +B
FL1
FL2
KPD6 CN413 J6
To TRANS assy J6
R455 220.0k
2SA933S Q419
R449 150k
2SA933S Q420
R450 22.0k
R458 3.9K
D415
Q419, Q420 : THERMO DETECTOR
JP
R TO TONE
L FROM TONE
-12V
R FROM TONE
D414
R497 33 2W
V+12V
AD.GND
REG -B
AD.GND
REG +B
A-12V
REG +B
A+12V
REG +B
HIGH/LOW
D.GND
J9
To REG assy J9
To POWER TRANSFORMER
+5.5V
ACH7002 R417 100 5W
R431
D417 MTZJ6.8C
C410 10/50
-18.0V
C400 47/25
D412 MTZJ18C-TP
C407 47/50
R424 5W
-22.6V
D411
MUTE D437
DTA143E3-T Q707
Q708 DTA143E3-T
Q707, Q708 : MUTE
D413
R439 22 1/2W
2SC17405 Q414
RY401 ASR1036
R451 2.7k
R457 1.8k
R452 4.7k
FU1 AKK-1004
C420
C422 ACG1054
P405 P406 AKC-083
+12.2V
+10.7V
+5.6V
IC705 NJM78M56FA5
VOUT VIN GND
R445 5W 220
R444 10 1/2W
R434 220
D496 MTZJ13A-TP
C408 47/50
C411 0.1/25
HEAT SINK
R494 82 1/2W
R495 82 1/2W
R432 3.3k
D418
D425 D424 D423 D422
1SR139-100-TP
C415
C415: 1000/25 (HAO)
T401 SUB TRANS
0.1/25
SDXJ TYPE ONLY
FU2 AKK-1004
P401 P404 P403 P402
AKC1014
AKC-081
KUXJ, KCXJ TYPES ONLY
R441 220k
C412
AWK-142
NEUTRAL LIVE
AKP1040 AN401
FU1
REK1087 (10A/125V) : KUXJ,KCXJ
REK1083 (5A/125V) : SDXJ
FU4
REK1084 (5A/125V) : SDXJ ONLY
AC POWER CORD
C(1:3)
F(1:2)
E(1:4)
C(1:2)
SP B
SP A
PROTECTION
RC.SP
A.MUTE
LOUD/DISP
4052B
4052A
CK
DATA
TMUTE
STEREO
W.UP
RMC
SR IN
9K.10K
SR OUT
MONO
STOP(TUNE)
VOL UP
VOL DOWN
VCONT.A
VCONT.B
WATT
DC PROT
OVERLOAD
-B
+B
HIGH/LOW
ACRY
TEMP IN
STFUNC
STSUR
CE
To FL AND UCOM assy CN901 (➔SCH- 3F)
A B C D E F

●NOTE FOR FUSE REPLACEMENT

CAUTION – FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,
REPLACE ONLY WITH SAME TYPE AND RATINGS ONLY.

SCH−2F

PS AND FUNC assy


AKE7005
AKP1060
ASR1036 /604, 504, 59
ACG1054
AKC1016 /SD
SD ONLY
FU1
P401
P405
P406
AKC-083
SD ONLY ACE-507
AKF-116
ACN-208
AKN-142
PRIMARY
/SD AKC-081
P403
P404
P402
/KU, SD ATT7006
/HL ATT7007
RISK OF FIRE-REPLACE FUSE AS MARKED.
STAND BY
SP OUTPUT
ASR7001
CEAS102H25
KPD3
NJM5685
PRE OUT
SUB OUT
AKB7001
AKB7004
VCR
LD
V. M./CD
PLAY
AV FUNCTION
IC9163
4052
KM250HAS
LA7952
AK1080
J4 DYY07-200-2651
S OUT
GND
C OUT
D. +5V
TEMP
AC PRT
P. LOAD
RS1LMF331J
RS1LMF3R9J
PROTECTION
ACN7002
LA2785
SURROUND
LV1010
4558
J17 DYY12-300-2651
AK1085
/604, 504, 59 ACH7010
D5SBA20F
POWER SUPPLY
J3 DYY10-200-2651
AK1083
ASR1044
ASR1044
J6 DYY06-300-2651 AK1079
REG -B
REG. GND
REG. GND
REG +B
FL
FL
CEAS102H35
CEAS222M35
J9 D15A11-150-2651
AK1100
REGULATOR
FRONT
ANP7057-C
AWZ
J724 C-7589
AKP1085
-B VH
-B VL
GND
+B VL
+B VH
804 ONLY
1
2
3
4
5
6
A
B
C
D

To AC POWER CORD
- NEUTRAL
- LIVE

To S2 VOLTAGE SELECTOR
(SDXJ YTPE ONLY)

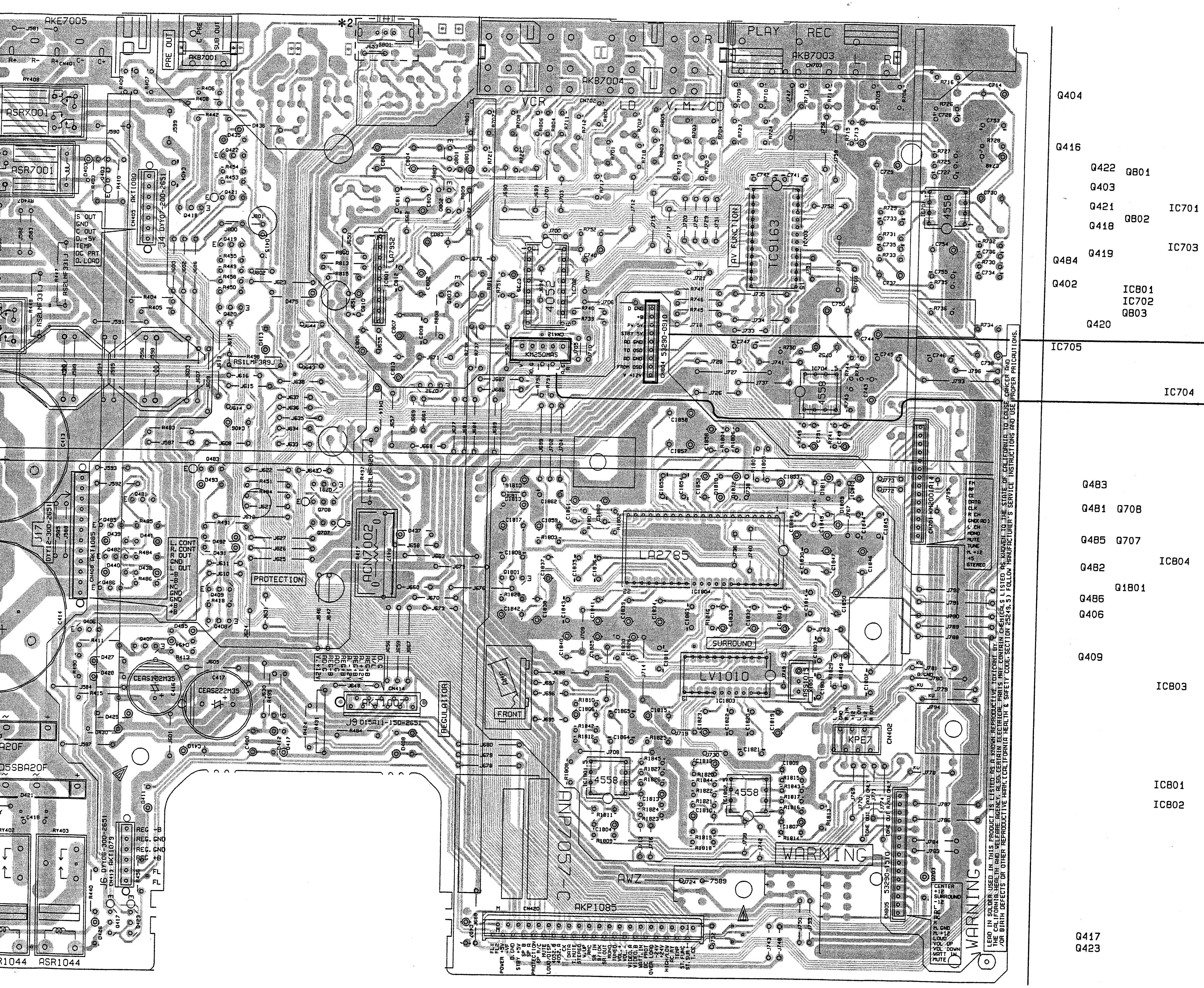
To POWER TRANSFORMER 4 (KUXJ, KCXJ TYPES)
To S1 VOLTAGE SELECTOR 1 (SDXJ TYPE)

To POWER TRANSFORMER 1

To POWER TRANSFORMER 8 (SDXJ TYPE ONLY)

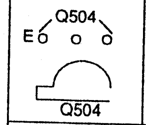
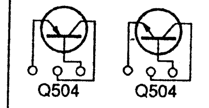
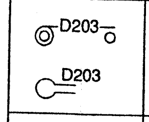
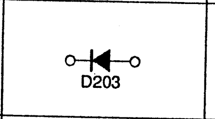
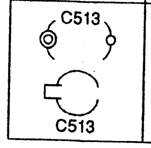
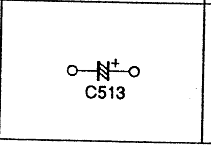
*1: VSX- 604S/KUXJ, KCXJ ONLY
*2: VSX- 604S/SDXJ

- This diagram is viewed from the mounted parts side.


4
5
6
7
8
A
B
C
D
AKE7005
ASR7001
AKB7001
PRE OUT
SUB OUT
C PRE
AKB7004
PLAY
REC
AKB7003
VCR
LD
V.M./CD
AV FUNCTION
TC9163
4052
KM250MAS
53290-0910
4558
LA2785
ACN7002
PROTECTION
SURROUND
LV1010
REGULATOR
FRONT
KPE7
4558
4558
WARNING
ANP7057-C
AWZ
AKP1085
CEAS102M35
CEAS222M35
ASR1044
Q404
Q416
Q422
Q801
Q403
Q421
IC701
Q418
Q802
Q419
IC703
Q484
Q402
IC801
IC702
Q803
Q420
IC705
To GUI AND UCOM assy CN1184
IC704
To FRONT AV assy CN992
Q483
Q481
Q708
Q485
Q707
IC804
Q482
Q1801
Q486
Q406
Q409
IC803
IC801
IC802
Q417
Q423
4
5
6
7
8
9

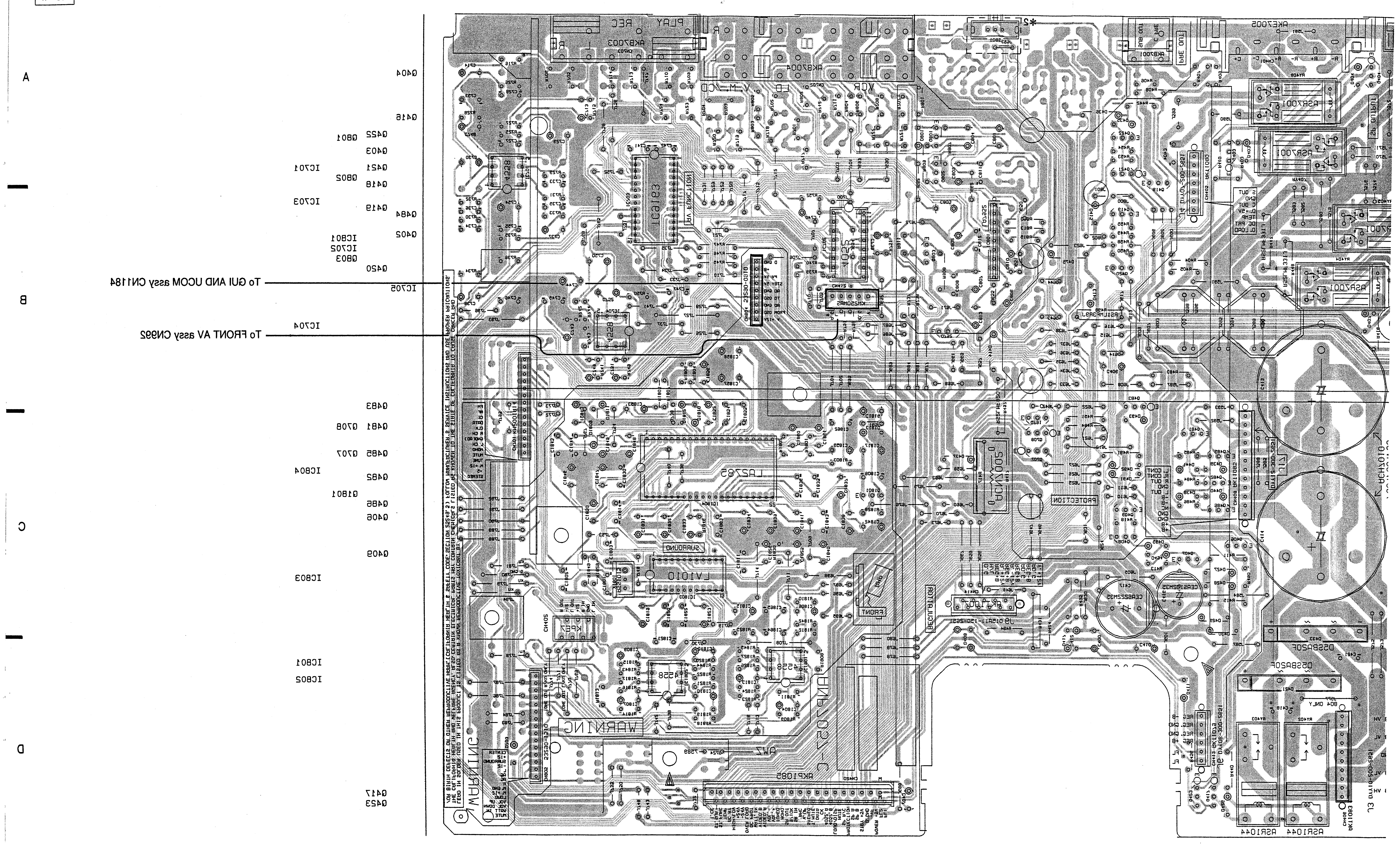
NOTE FOR PCB DIAGRAMS:

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

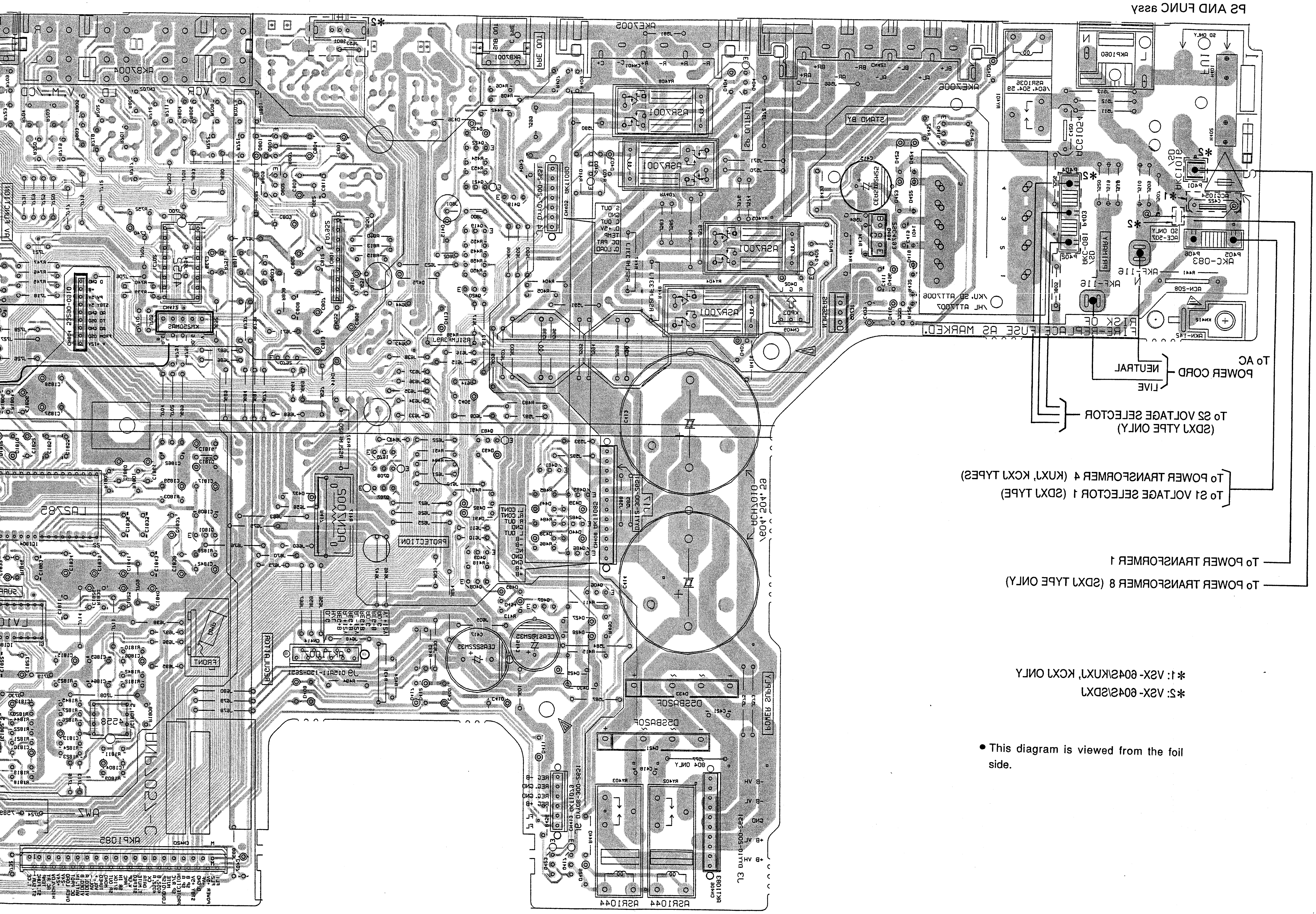
Symbol In PCB Diagrams	Symbol in Schematic Diagrams	Part Name
 Q504 E Q504	 Q504 Q504	Transistor
 D203 D203	 D203	Diode
 C513 C513	 C513	Capacitor (Polarized)

3. The transistor terminal marked with E or ⊏ shows the emitter.
4. The diode terminal marked with ◎ or ⊂ shows cathode side.
5. The capacitor terminal marked with ◎ or ⊏ shows negative terminal.

PCB-1F


A
B
C
D
9
8
7
6
5
4
Q404
Q416
Q422
Q801
Q403
Q421
IC701
Q418
Q802
IC703
Q419
Q484
Q402
IC801
IC702
Q803
Q420
IC705
To GUI AND UCOM assy CN1184
IC704
To FRONT AV assy CN992
Q483
Q481
Q708
Q485
Q707
IC804
Q482
Q1801
Q486
Q406
Q409
IC803
IC801
IC802
Q417
Q423
AKB7003
AKB7004
AKE7005
PLAY
REC
VCR
CD
LD
ASR7001
LA2785
LV1010
ACV7002
KM200NA5
KM300NA5
WARNING
SURROUND
PROTECTION
FRONT
AKP1085
ASR1044
CERS2S2M35
DS5BA20F

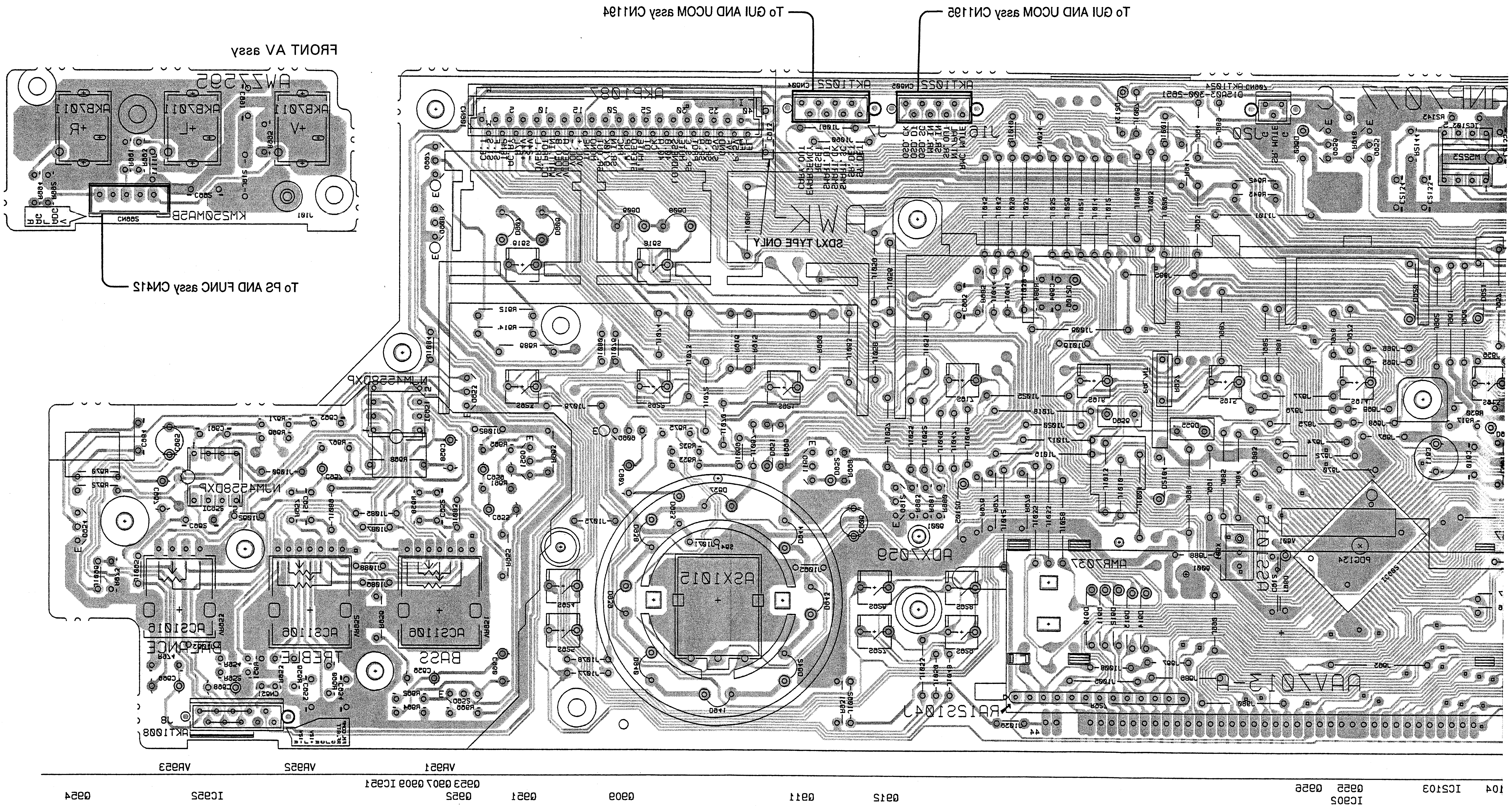
PS AND FUNC assy


6
5
4
3
2
1
A
B
C
D
RISK OF FIRE-REPLACE FUSE AS MARKED.
STAND BY
PROTECTION
POWER SUPPLY
To AC POWER CORD
NEUTRAL
LIVE
To S2 VOLTAGE SELECTOR (SDXJ TYPE ONLY)
To POWER TRANSFORMER 4 (KUXJ, KCXJ TYPES)
To S1 VOLTAGE SELECTOR 1 (SDXJ TYPE)
To POWER TRANSFORMER 1
To POWER TRANSFORMER 8 (SDXJ TYPE ONLY)

*1: VSX-604S/KUXJ, KCXJ ONLY
*2: VSX-604S/SDXJ

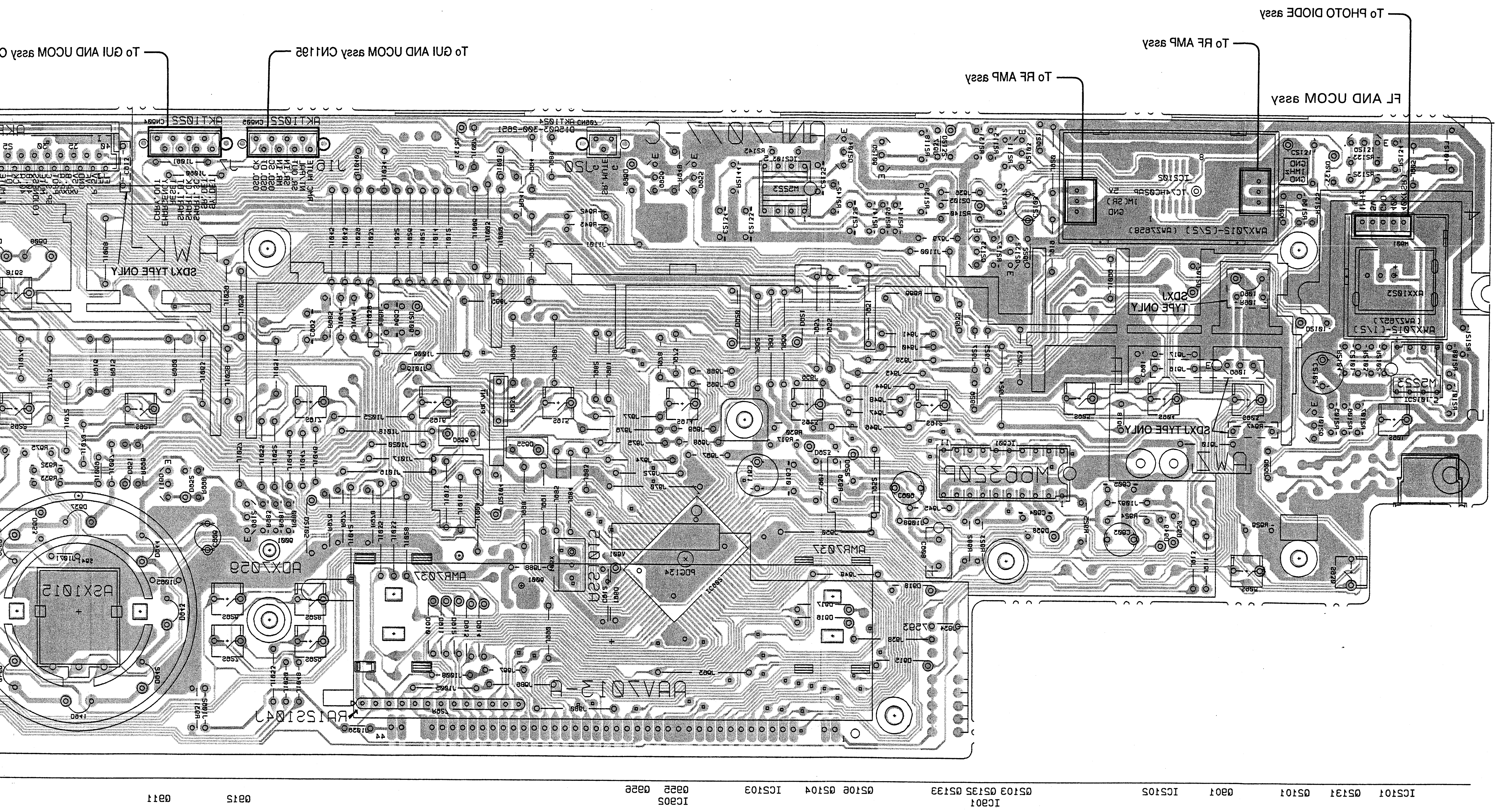
- This diagram is viewed from the foil side.

- This diagram is viewed from the foil side.


To GUI AND UCOM assy CN1194
To GUI AND UCOM assy CN1195
FRONT AV assy
To PS AND FUNC assy CN412
SDX1 TYPE ONLY

3.3 FL AND UCOM ASSY AND FRONT AV ASSY

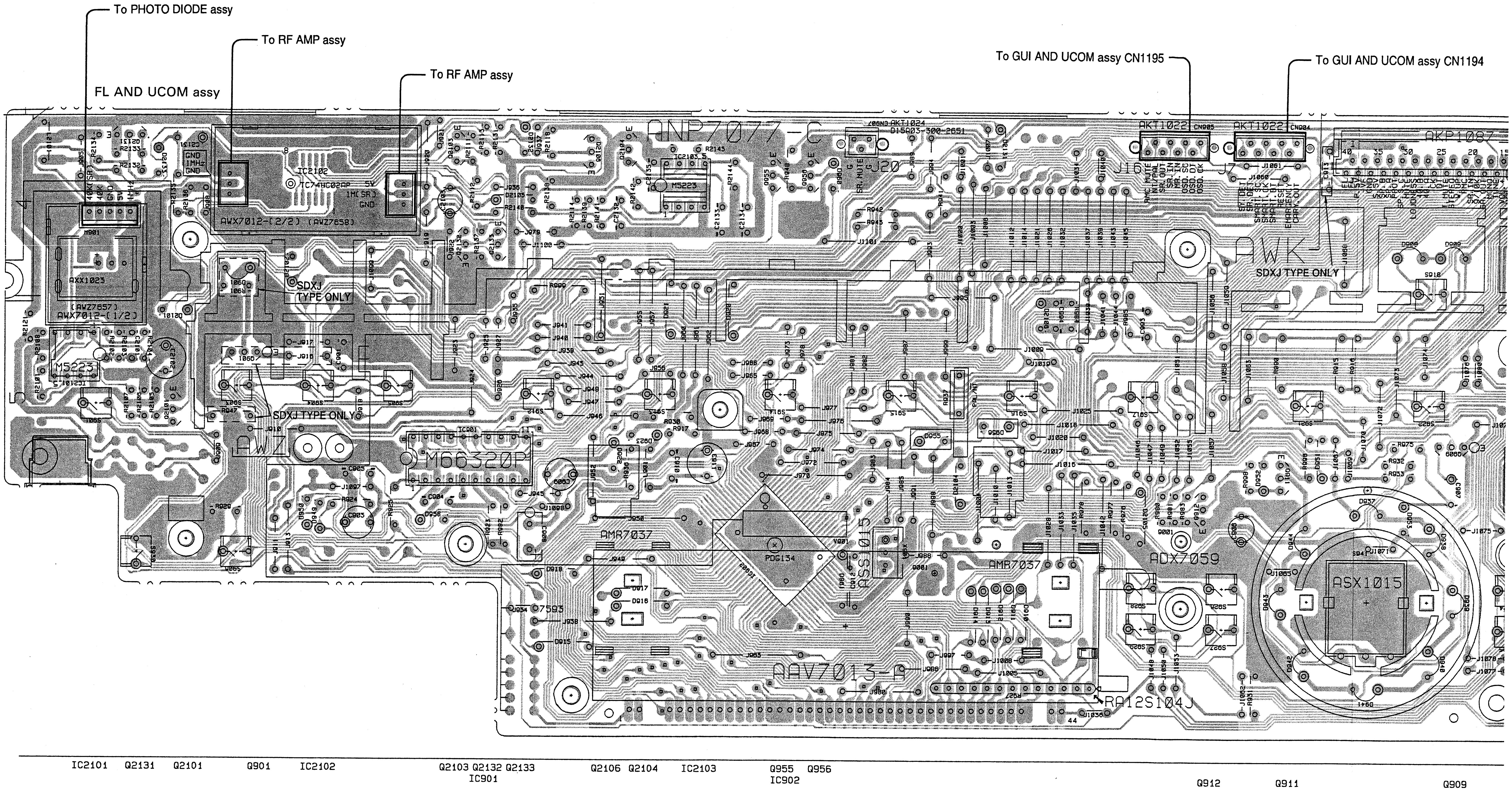
- This diagram is viewed from the foil side.


To PHOTO DIODE assy
To RF AMP assy
To RF AMP assy
FL AND UCOM assy
To GUI AND UCOM assy CN1195
To GUI AND UCOM assy C
AKT1022 CN604
AKT1022 CN605
SDXJ TYPE ONLY
SDXJ TYPE ONLY
SDXJ TYPE ONLY
AWX7012-(1/2) (AWZ7657)
AWX7012-(2/2) (AWZ7658)
AXX1025
IC2102
M5223
M66320P
PDC134
AMR7037
AMR7037
ADX7059
ASX1015
AAV7013-A
RAI2S104J
IC2101 Q2131 Q2101 Q901 IC2102 Q2103 Q2132 Q2133 IC901 Q2106 Q2104 IC2103 Q955 Q956 IC902 Q912 Q911

6 5 4 3 2 1
A B C D

3.3 FL AND UCOM ASSY AND FRONT AV ASSY

- This diagram is viewed from the mounted parts side.

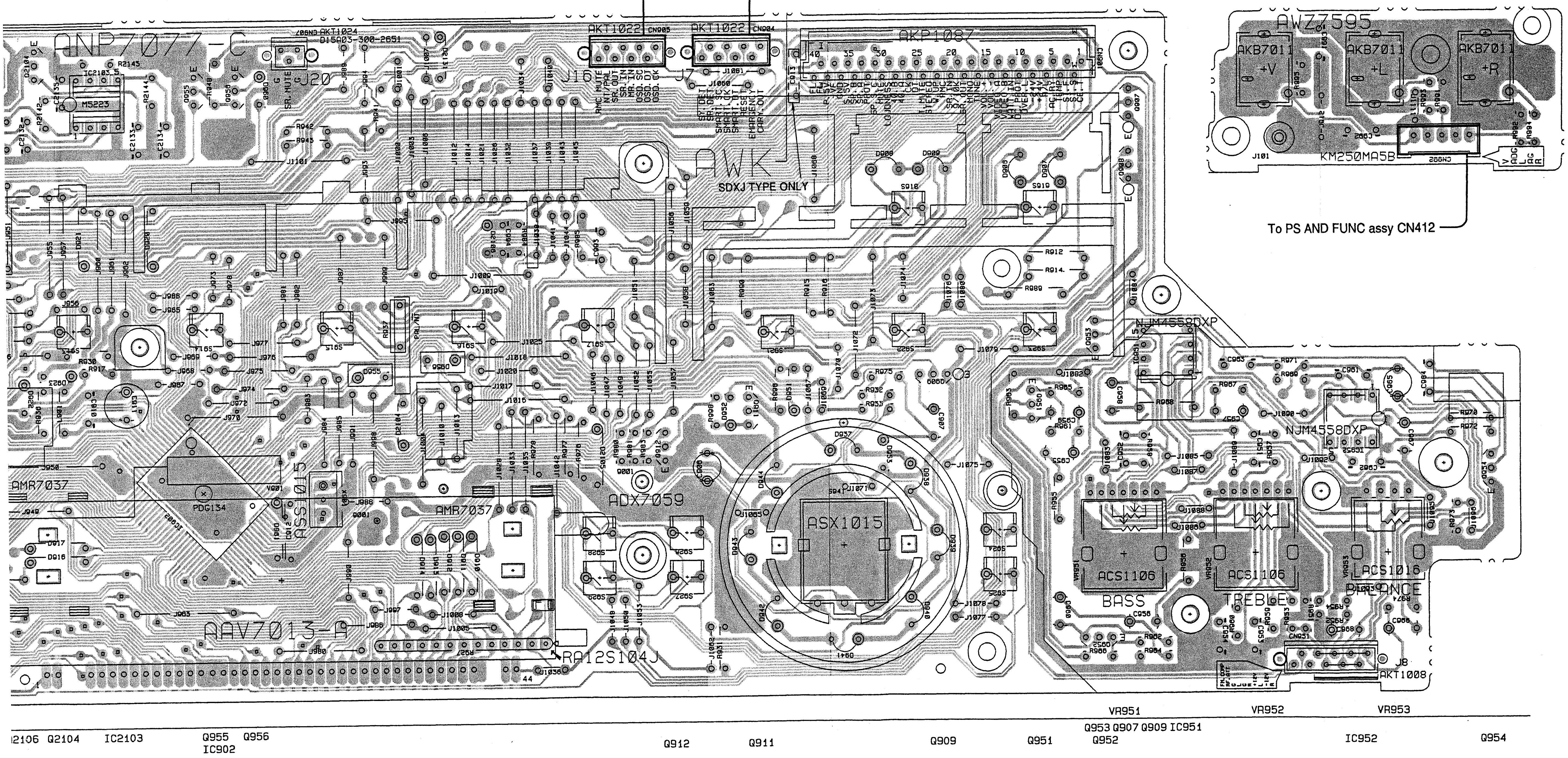

To PHOTO DIODE assy
To RF AMP assy
To RF AMP assy
To GUI AND UCOM assy CN1195
To GUI AND UCOM assy CN1194
FL AND UCOM assy
ANP7077-C
AKT1024
AKT1022
AKT1022
AKP1087
AWX7012-(2/2) (AWZ7658)
IC2102
TC74HC02AP
M5223
AXX1023
(AWZ7657)
AWX7012-(1/2)
SDXJ TYPE ONLY
SDXJ TYPE ONLY
SDXJ TYPE ONLY
AWZ
AWK
M66320P
AMR7037
AMR7037
PDG134
ASS1015
ADX7059
ASX1015
AAV7013-A
RA12S104J
IC2101 Q2131 Q2101 Q901 IC2102 Q2103 Q2132 Q2133 IC901 Q2106 Q2104 IC2103 Q955 Q956 IC902 Q912 Q911 Q909

- This diagram is viewed from the mounted parts side.

To GUI AND UCOM assy CN1195

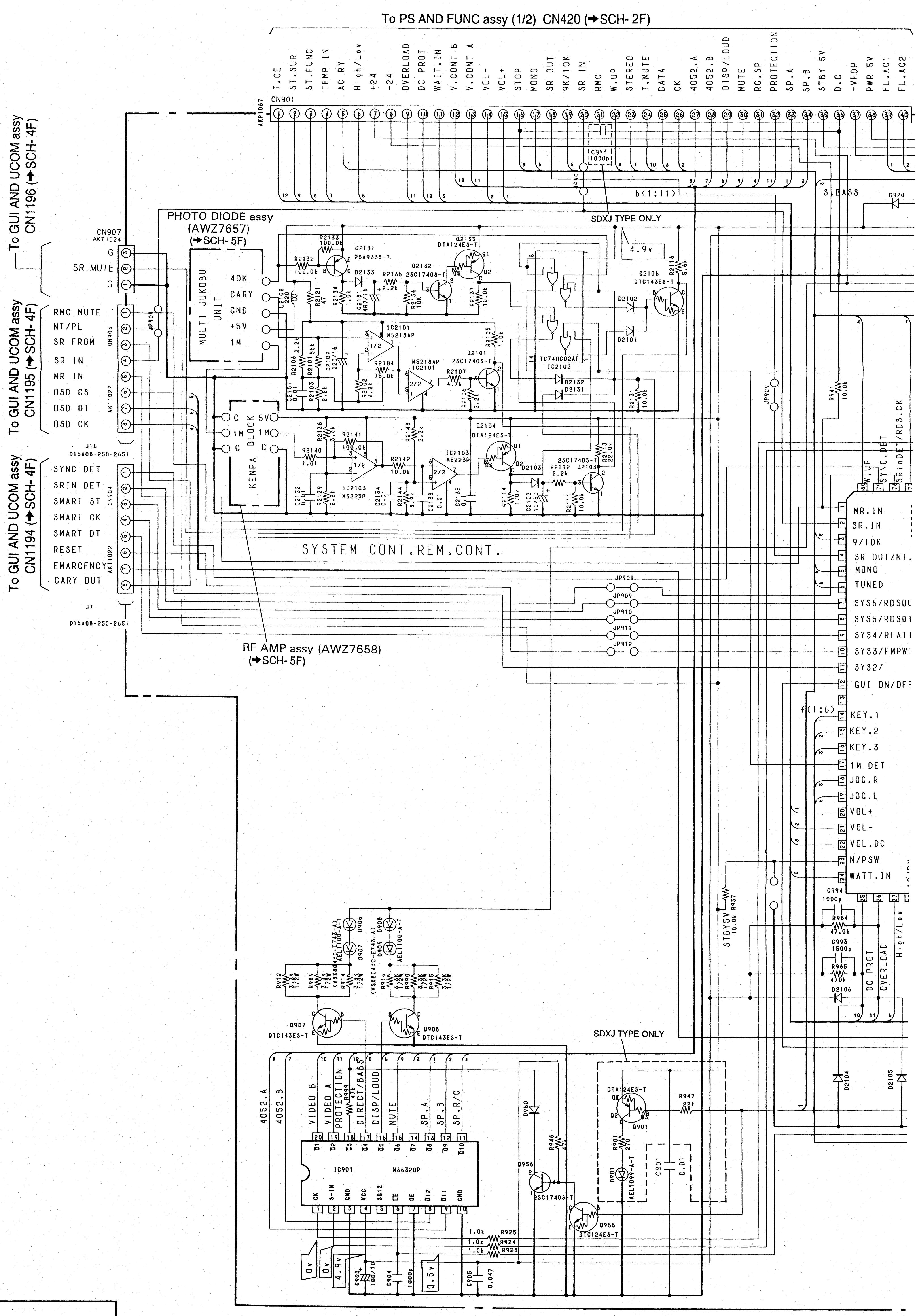
To GUI AND UCOM assy CN1194

FRONT AV assy


ANP7077-C
AKT1024
DI5A03-300-2651
AKT1022 CN905
AKT1022 CN904
AKP1087
J20
J16
J7
IC2103
M5223
AWK
SDXJ TYPE ONLY
AMR7037
PDG134
ASS1015
ADX7059
ASX1015
AAV7013-B
RA12S104J
NJM4558DXP
ACS1106
BASS
ACS1106
TREBLE
ACS1016
BALANCE
AKT1008
AWZ7595
AKB7011 +V
AKB7011 +L
AKB7011 +R
KM250MA5B
CN902
J101
VR951
VR952
VR953
Q953 Q907 Q909 IC951
2106 Q2104 IC2103
Q955 Q956
IC902
Q912
Q911
Q909
Q951
Q952
IC952
Q954

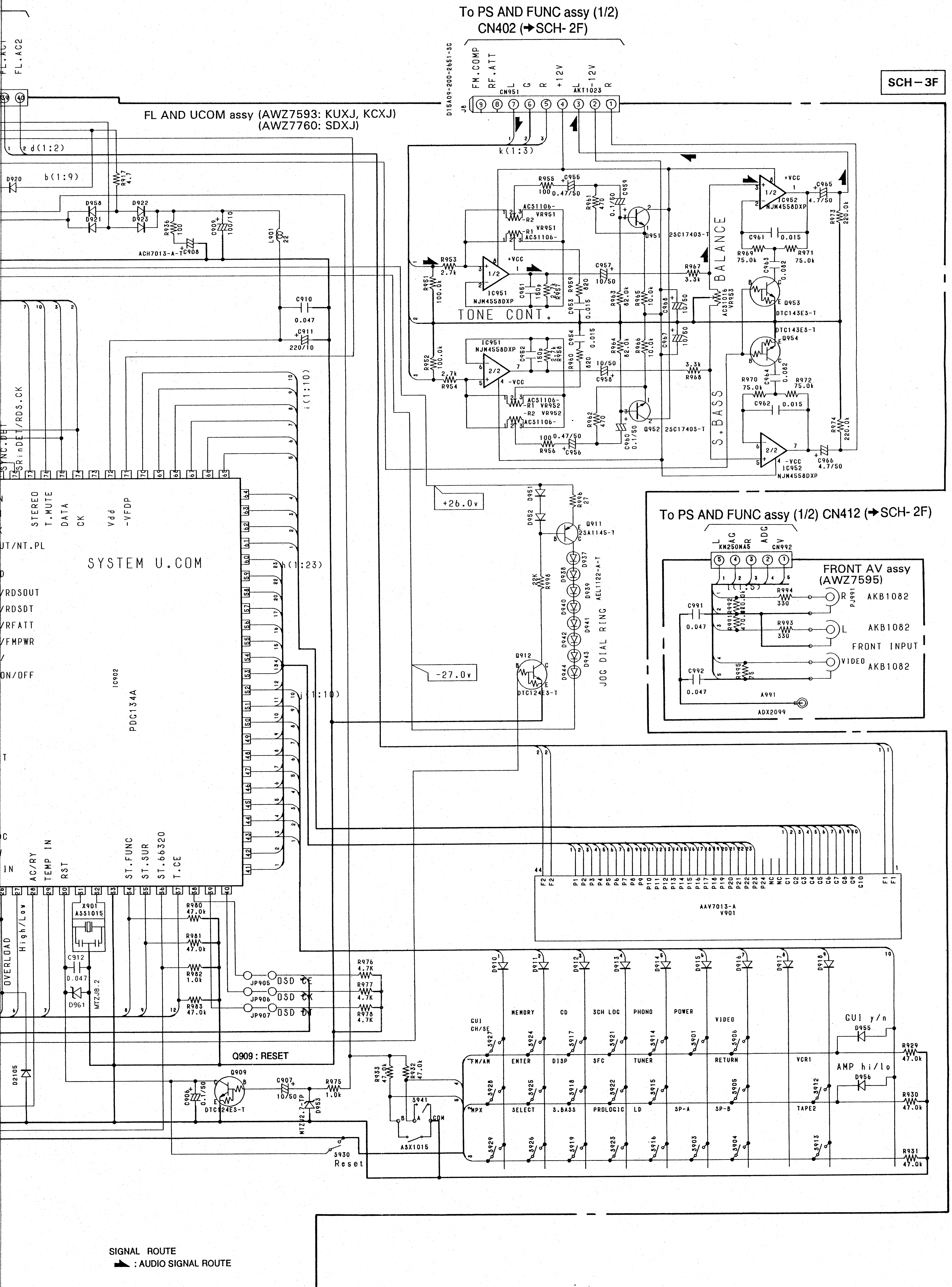
To PS AND FUNC assy CN412

A
B
C
D


To PS AND FUNC assy (1/2) CN420 (→SCH- 2F)
T.CE
ST.SUR
ST.FUNC
TEMP IN
AC RY
High/Low
+24
-24
OVERLOAD
DC PROT
WAIT.IN
V.CONT B
V.CONT A
VOL-
VOL+
STOP
MONO
SR OUT
9K/10K
SR IN
RMC
W.UP
STEREO
T.MUTE
DATA
CK
4052.A
4052.B
DISP/LOUD
MUTE
RC.SP
PROTECTION
SP.A
SP.B
STBY 5V
D.G
-VFDP
PWR 5V
FL.AC1
FL.AC2
AKP1067
CN901
C913 1000p
SDXJ TYPE ONLY
b(1:11)
S.BASS
D920
To GUI AND UCOM assy CN1196 (→SCH- 4F)
CN907 AKT1024
G
SR.MUTE
G
PHOTO DIODE assy (AWZ7657) (→SCH- 5F)
MULTI JUKOBU UNIT
40K
CARY
GND
+5V
1M
To GUI AND UCOM assy CN1195 (→SCH- 4F)
RMC MUTE
NT/PL
SR FROM
SR IN
MR IN
OSD CS
OSD DT
OSD CK
CN905
AKT1022
JP908
J16 D15A08-250-2651
To GUI AND UCOM assy CN1194 (→SCH- 4F)
SYNC DET
SRIN DET
SMART ST
SMART CK
SMART DT
RESET
EMARGENCY
CARY OUT
CN904
AKT1022
J7 D15A08-250-2651
Q2131 2SA933S-T
R2133 100.0k
R2132 100.0k
D2133
Q2132 2SC1740S-T
R2135 2.2k
R2136 10k
Q2133 DTA124ES-T
R2137 10.0k
R2121 47
L2102 220
R2134 1.0k
C2131 4R7/16
IC2101 M5218AP
R2105 1.0k
R2108 2.2k
R2101 56k
C2102 220/16
R2104 75.0k
R2102 2.2k
R2103 2.2k
C2101 0.01
M5218AP IC2101
Q2101 2SC1740S-T
R2107 4.7k
R2106 2.2k
TC74HC02AF IC2102
D2102
D2101
D2132
D2131
Q2106 DTC143ES-T
R2118 5.6k
4.9v
R2131 10.0k
JP909
R941 10.0k
KENPA BLOCK
G
1M
G
5V
1M
G
R2138 3.3k
R2141 100.0k
R2140 1.0k
R2143 2.2k
R2142 10.0k
IC2103 M5223P
C2132 0.01
R2139 2.2k
C2134 0.01
R2144 3.9k
C2133 0.01
Q2104 DTA124ES-T
D2103
R2112 2.2k
Q2103 2SC1740S-T
R2113 22.0k
R2114 1.0k
C2103 10/50
R2111 10.0k
C2135 0.1
SYSTEM CONT.REM.CONT.
JP909
JP909
JP910
JP911
JP912
RF AMP assy (AWZ7658) (→SCH- 5F)
W.UP
SYNC.DET
SRinDET/RDS.CK
MR.IN
SR.IN
9/10K
SR OUT/NT.
MONO
TUNED
SYS6/RDSDU
SYS5/RDSDT
SYS4/RFATT
SYS3/FMPWR
SYS2/
GUI ON/OFF
f(1:6)
KEY.1
KEY.2
KEY.3
1M DET
JOG.R
JOG.L
VOL+
VOL-
VOL.DC
N/PSW
WATT.IN
STBY5V
R937 10.0k
C994 1000p
R984 47.0k
C993 1500p
R985 470k
D2106
DC PROT
OVERLOAD
High/Low
D2104
D2105
D906
D907
D908
D909
AEL1100-A-T
(V3X804):C-E743-A)
R912
R989
R914
R916
R990
R915
3.3k 1/2W
Q907 DTC143ES-T
Q908 DTC143ES-T
4052.A
4052.B
VIDEO B
VIDEO A
PROTECTION
R999 47k
DIRECT/BASS
DISP/LOUD
MUTE
SP.A
SP.B
SP.R/C
IC901 M66320P
CK
S-IN
GND
VCC
SO12
LE
OE
O12
O11
GND
D960
R946
Q956 2SC1740S-T
Q955 DTC124ES-T
SDXJ TYPE ONLY
DTA124ES-T
Q901
R947 22k
R901 270
D901 AEL1099-A-T
C901 0.01
1.0k R925
1.0k R924
1.0k R923
0v
0v
4.9v
C903 100/10
C904 1000p
0.5v
C905 0.047

SCH－3F

FL AND UCOM ASSY,
FRONT AV ASSY

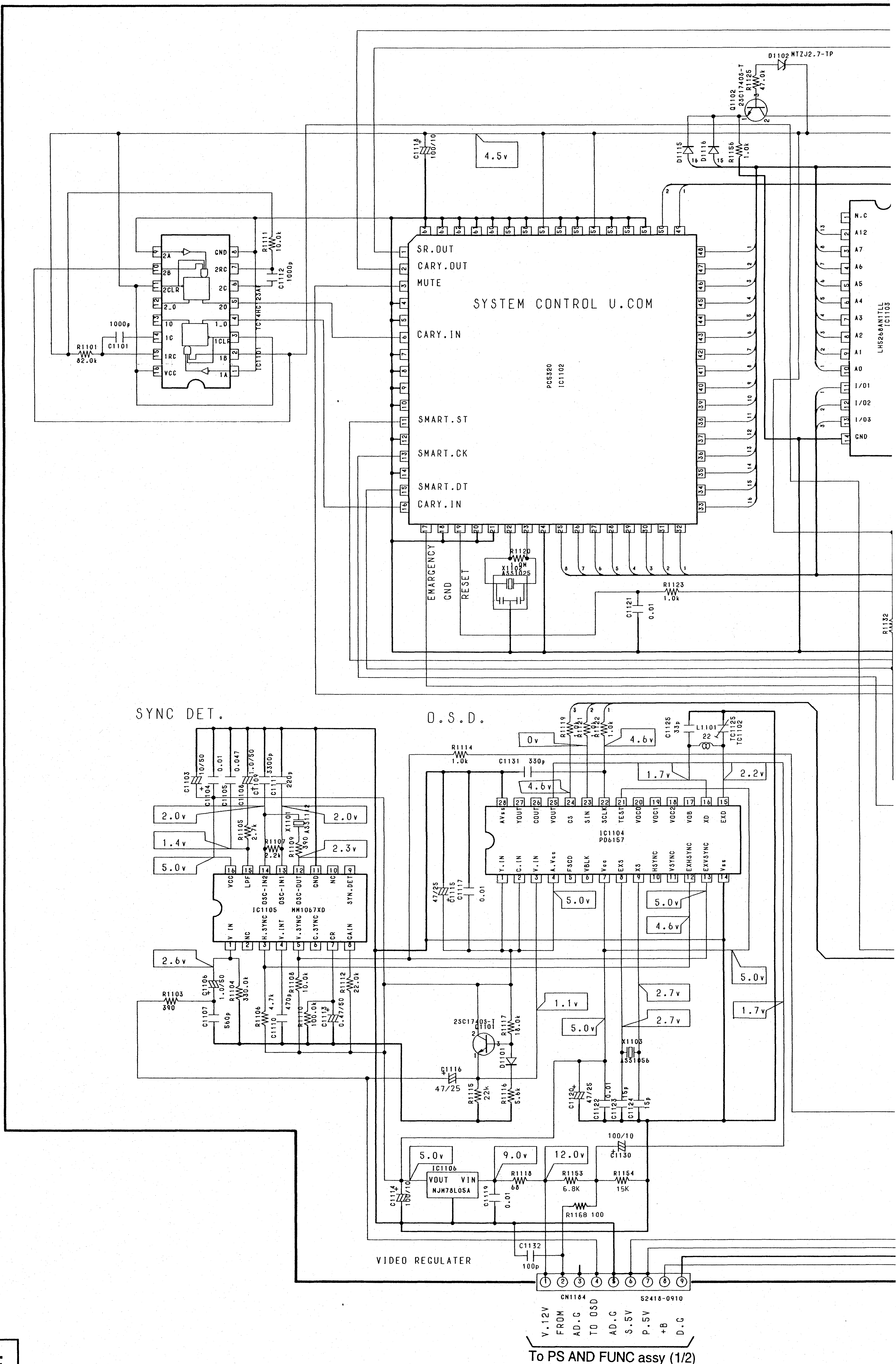

To PS AND FUNC assy (1/2)
CN402 (➔SCH- 2F)
SCH-3F
FL AND UCOM assy (AWZ7593: KUXJ, KCXJ)
(AWZ7760: SDXJ)
FL.AC1
FL.AC2
FM.COMP
RF.ATT
L
G
R
+12V
-12V
CN951
AKT1023
D15A09-200-2651-SG
k(1:3)
d(1:2)
b(1:9)
D920
D958
D921
D922
D923
R917 4.7
R936 100
C909 100/10
ACH7013-A-T
C908
L901 22
C910 0.047
C911 220/10
R955 100
C955 0.47/50
ACS1106-VR951
R961 470
C959 0.1/50
Q951 2SC1740S-T
R953 2.7k
IC951 NJM4558DXP
R951 100.0k
C951 150p
R957 8.2k
R959 820
C953 0.015
C957 10/50
R963 82.0k
R965 10.0k
C968 10/50
R967 3.3k
BALANCE
ACS1016 VR953
Q953 DTC143ES-T
Q954 DTC143ES-T
TONE CONT.
R952 100.0k
R954 2.7k
C952 150p
R958 8.2k
C954 0.015
R960 820
C958 10/50
R964 82.0k
R966 10.0k
C967 10/50
R968 3.3k
ACS1106-VR952
R962 470
C960 0.1/50
Q952 2SC1740S-T
R956 100
C956 0.47/50
S.BASS
+VCC
-VCC
IC952 NJM4558DXP
C965 4.7/50
R973 220.0k
C961 0.015
R969 75.0k
R971 75.0k
C963 0.082
C964 0.082
R970 75.0k
R972 75.0k
C962 0.015
R974 220.0k
C966 4.7/50
+26.0v
-27.0v
D951
D952
R996 27
Q911 2SA1145-T
R996 22K
D937
D938
D939
D940
D941
D942
D943
D944
AEL1122-A-T
JOG DIAL RING
Q912 DTC124ES-T
To PS AND FUNC assy (1/2) CN412 (➔SCH- 2F)
KN250MA5
CN992
ADG
FRONT AV assy
(AWZ7595)
C991 0.047
C992 0.047
R994 330
R993 330
PJ991
AKB1082
FRONT INPUT
VIDEO
A991
ADX2099
SYNC.DET
SRinDET/RDS.CK
STEREO
T.MUTE
DATA
CK
Vdd
-VFDP
SYSTEM U.COM
IC902
PDG134A
UT/NT.PL
/RDSOUT
/RDSDT
/RFATT
/FMPWR
ON/OFF
h(1:23)
i(1:10)
j(1:10)
AC/RY
TEMP IN
RST
ST.FUNC
ST.SUR
ST.66320
T.CE
OVERLOAD
High/Low
X901 ASS1015
C912 0.047
D961 MTZJ8.2
R980 47.0k
R981 47.0k
R982 1.0k
R983 47.0k
JP905 OSD CE
JP906 OSD CK
JP907 OSD DT
R976 4.7K
R977 4.7K
R978 4.7K
Q909 : RESET
Q909 DTC124ES-T
C906 0.1/50
C907 10/50
R975 1.0k
D953 MTZJ2.7-TP
D2105
S930 Reset
R933 47.0k
R932 47.0k
S941
ASX1015
COM
AAV7013-A
V901
F2 P1 P2 P3 P4 P5 P6 P7 P8 P9 P10 P11 P12 P13 P14 P15 P16 P17 P18 P19 P20 P21 P22 P23 P24 NC G1 G2 G3 G4 G5 G6 G7 G8 G9 G10 F1
D910 D911 D912 D913 D914 D915 D916 D917 D918
GUI CH/SE
MEMORY
CD
3CH LOG
PHONO
POWER
VIDEO
GUI y/n
D955
FM/AM
ENTER
DISP
3FC
TUNER
RETURN
VCR1
AMP hi/lo
D956
MPX
SELECT
S.BASS
PROLOGIC
LD
SP-A
SP-B
TAPE2
S927 S924 S917 S921 S914 S901 S906
S928 S925 S918 S922 S915 S905 S912
S929 S926 S919 S923 S916 S903 S904 S913
R929 47.0k
R930 47.0k
R931 47.0k
A B C D E

SIGNAL ROUTE
▶ : AUDIO SIGNAL ROUTE

FL AND UCOM ASSY,
FRONT AV ASSY

SCH-3F

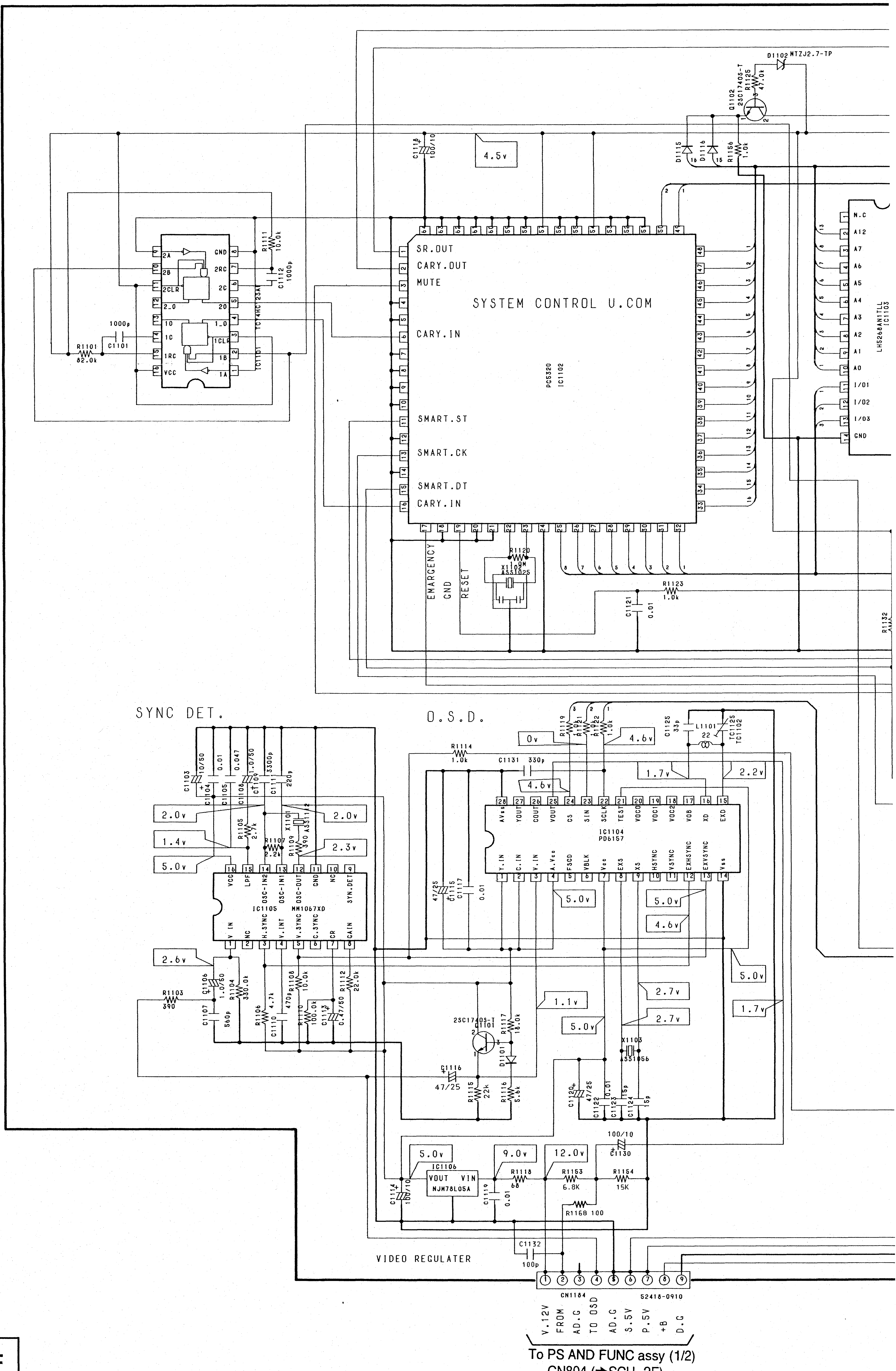
3.4 GUI AND UCOM ASSY, PHOTO DIODE ASSY AND RF AMP ASSY


SYSTEM CONTROL U.COM
PCS320
IC1102
SR.OUT
CARY.OUT
MUTE
CARY.IN
SMART.ST
SMART.CK
SMART.DT
CARY.IN
EMERGENCY
GND
RESET
R1120 1.0M
X1102 ASS1025
R1123 1.0k
C1121 0.01
C1118 100/10
4.5v
D1102 MTZJ2.7-TP
Q1102 2SC1740S-T
R1125 47.0k
D1115
D1116
R1156 1.0k
LH5268ANITLL
IC1103
N.C
A12
A7
A6
A5
A4
A3
A2
A1
A0
I/O1
I/O2
I/O3
GND
R1132
TC74HC123AF
IC1101
2A
2B
2CLR
2_Q
1Q
1C
1RC
VCC
GND
2RC
2C
2Q
1_Q
1CLR
1B
1A
R1111 10.0k
C1112 1000p
R1101 82.0k
C1101 1000p
SYNC DET.
C1103 10/50
C1104 0.01
C1105 0.047
C1108 1.0/50
C1109 3300p
C1111 220p
2.0v
2.0v
1.4v
5.0v
2.3v
R1105 2.7k
R1107 2.2k
R1109 390
X1101 ASS1112
IC1105 MM1067XD
VCC
LPF
OSC-IN2
OSC-IN1
OSC-OUT
GND
NC
SYN.DET
V.IN
NC
H.SYNC
V.INT
V.SYNC
C.SYNC
CR
GAIN
2.6v
C1106 1.0/50
R1104 330.0k
R1103 390
C1107 560p
R1106 4.7k
C1110 470p
R1108 10.0k
R1110 100.0k
C1113 0.47/50
R1112 22.0k
O.S.D.
R1114 1.0k
C1131 330p
R1119
R1121
R1122 1.0k
0v
4.6v
4.6v
C1126 33p
L1101 22
TC1125 TC1102
1.7v
2.2v
IC1104 PD6157
AVss
YOUT
COUT
VOUT
CS
SIN
SCLK
TEST
VOCO
VOC1
VOC2
VOB
XD
EXD
Y.IN
C.IN
V.IN
A.Vcc
FSCO
VBLK
Vcc
EXS
XS
HSYNC
VSYNC
EXHSYNC
EXVSYNC
Vss
C1115 47/25
C1117 0.01
5.0v
5.0v
4.6v
5.0v
2.7v
2.7v
1.7v
1.1v
5.0v
2SC1740S-T
Q1101
R1117 18.0k
D1101
C1116 47/25
R1115 22k
R1116 5.6k
X1103 ASS1056
C1120 47/25
C1122 0.01
C1123 15p
C1124 15p
100/10
C1130
5.0v
9.0v
12.0v
IC1106 NJM78L05A
VOUT VIN
C1114 100/10
C1119 0.01
R1118 68
R1153 6.8K
R1154 15K
R1168 100
C1132 100p
VIDEO REGULATER
CN1104
52418-0910
V.12V
FROM
AD.G
TO OSD
AD.G
S.5V
P.5V
+B
D.G

To PS AND FUNC assy (1/2)
CN804 (→SCH- 2F)

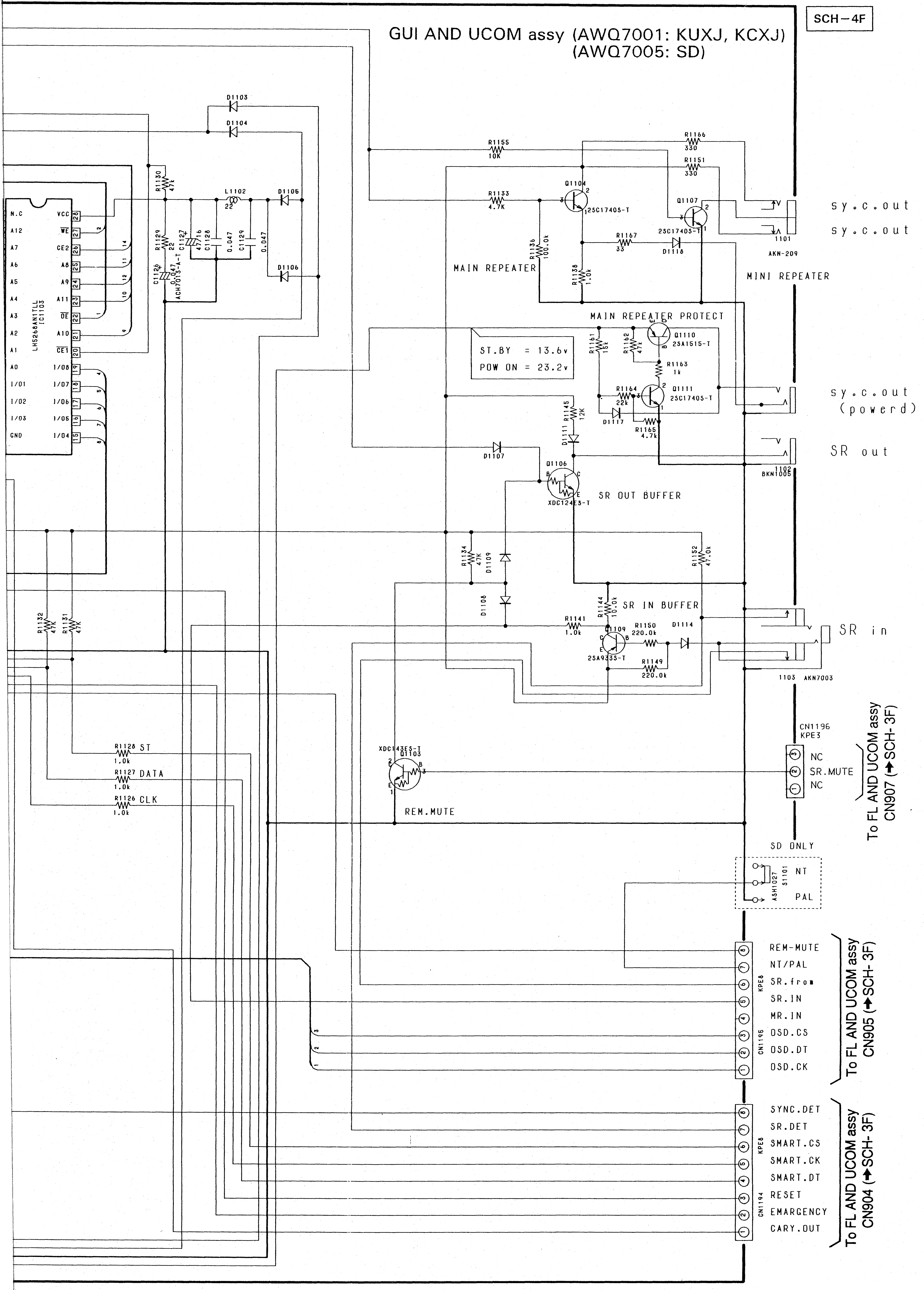
SCH−4F

3.4 GUI AND UCOM ASSY, PHOTO DIODE ASSY AND RF AMP ASSY


SYSTEM CONTROL U.COM
PC5320
IC1102
SR.OUT
CARY.OUT
MUTE
CARY.IN
SMART.ST
SMART.CK
SMART.DT
CARY.IN
EMERGENCY
GND
RESET
R1120 1.0M
X1102 ASS1025
C1121 0.01
R1123 1.0k
C1118 100/10
4.5v
D1102 MTZJ2.7-TP
Q1102 2SC1740S-T
R1125 47.0k
D1115
D1116
R1156 1.0k
LH5268ANITLL
IC1103
N.C
A12
A7
A6
A5
A4
A3
A2
A1
A0
I/01
I/02
I/03
GND
R1132
TC74HC123AF
IC1101
2A
2B
2CLR
2_Q
1Q
1C
1RC
VCC
GND
2RC
2C
2Q
1_Q
1CLR
1B
1A
R1111 10.0k
C1112 1000p
1000p
C1101
R1101 82.0k
SYNC DET.
C1103 10/50
C1104 0.01
C1105 0.047
C1108 1.0/50
C1109 3300p
C1111 220p
2.0v
1.4v
5.0v
2.0v
2.3v
R1105 2.7k
R1107 2.2k
R1109 390
X1101 ASS1112
IC1105 MM1067XD
VCC
LPF
OSC-IN2
OSC-IN1
OSC-OUT
GND
NC
SYN.DET
V.IN
NC
H.SYNC
V.INT
V.SYNC
C.SYNC
CR
GAIN
2.6v
R1103 390
C1106 1.0/50
R1104 330.0k
C1107 560p
R1106 4.7k
C1110 470p
R1108 10.0k
R1110 100.0k
C1113 0.47/50
R1112 22.0k
O.S.D.
R1114 1.0k
C1131 330p
R1119
R1121
R1122 1.0k
0v
4.6v
4.6v
C1125 33p
L1101 22
TC1125 TC1102
1.7v
2.2v
IC1104
PD6157
AVss
YOUT
COUT
VOUT
CS
SIN
SCLK
TEST
VOCO
VOC1
VOC2
VOB
XD
EXD
Y.IN
C.IN
V.IN
A.Vcc
FSCD
VBLK
Vcc
EXS
XS
HSYNC
VSYNC
EXHSYNC
EXVSYNC
Vss
C1115 47/25
C1117 0.01
5.0v
5.0v
4.6v
5.0v
2.7v
2.7v
1.7v
1.1v
5.0v
2SC1740S-T
Q1101
R1117 18.0k
D1101
C1116 47/25
R1115 22k
R1116 5.6k
X1103 ASS1056
C1120 47/25
C1122 0.01
C1123 15p
C1124 15p
100/10
C1130
5.0v
IC1106
VOUT VIN
NJM78L05A
9.0v
12.0v
C1114 100/10
C1119 0.01
R1118 68
R1153 6.8K
R1154 15K
R1168 100
C1132 100p
VIDEO REGULATER
CN1184
52418-0910
V.12V
FROM AD.C
TO OSD
AD.C
S.5V
P.5V
+B
D.C

To PS AND FUNC assy (1/2)
CN804 (→SCH- 2F)

GUI AND UCOM assy (AWQ7001: KUXJ, KCXJ) (AWQ7005: SD)


IC1103 LH5268AN1TLL
N.C VCC 28
A12 WE 27
A7 CE2 26
A6 A8 25
A5 A9 24
A4 A11 23
A3 OE 22
A2 A10 21
A1 CE1 20
A0 I/O8 19
I/O1 I/O7 18
I/O2 I/O6 17
I/O3 I/O5 16
GND I/O4 15
D1103
D1104
D1105
D1106
L1102 22
R1130 47k
R1129 22
C1127 47/16
C1128 0.047
C1129 0.047
C1126 0.047
ACH7013-A-T
R1155 10K
R1133 4.7K
Q1104 2SC1740S-T
R1166 330
R1151 330
Q1107 2SC1740S-T
R1167 33
D1118
R1136 100.0k
R1138 1.0k
MAIN REPEATER
MINI REPEATER
1101 AKN-209
sy.c.out
sy.c.out
MAIN REPEATER PROTECT
ST.BY = 13.6v
POW ON = 23.2v
R1161 15k
R1162 47k
Q1110 2SA1515-T
R1163 1k
R1164 22k
Q1111 2SC1740S-T
D1117
R1165 4.7k
R1145 12K
D1111
sy.c.out (powerd)
SR out
1102 BKN1005
D1107
Q1106 XDC124ES-T
SR OUT BUFFER
R1134 47K
D1109
D1108
R1152 47.0k
R1144 10.0k
SR IN BUFFER
R1141 1.0k
Q1109 2SA933S-T
R1150 220.0k
D1114
R1149 220.0k
SR in
1103 AKN7003
R1132 47K
R1131 47K
R1128 1.0k ST
R1127 1.0k DATA
R1126 1.0k CLK
XDC143ES-T Q1103
REM.MUTE
CN1196 KPE3
3 NC
2 SR.MUTE
1 NC
To FL AND UCOM assy CN907 (➔SCH-3F)
SD ONLY
S1101 ASH1027
NT
PAL
CN1195 KPE8
8 REM-MUTE
7 NT/PAL
6 SR.from
5 SR.IN
4 MR.IN
3 OSD.CS
2 OSD.DT
1 OSD.CK
To FL AND UCOM assy CN905 (➔SCH-3F)
CN1194 KPE8
8 SYNC.DET
7 SR.DET
6 SMART.CS
5 SMART.CK
4 SMART.DT
3 RESET
2 EMARGENCY
1 CARY.OUT
To FL AND UCOM assy CN904 (➔SCH-3F)

- This diagram is viewed from the mounted parts side.

RF AMP assy

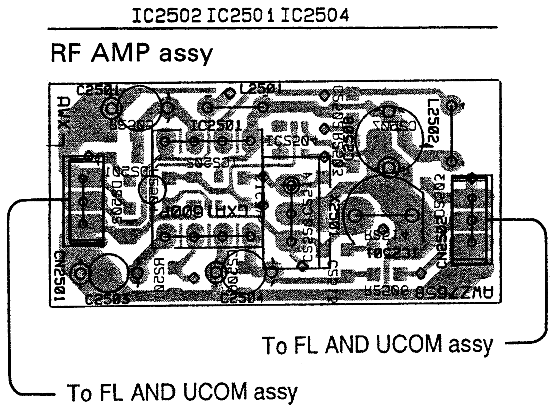
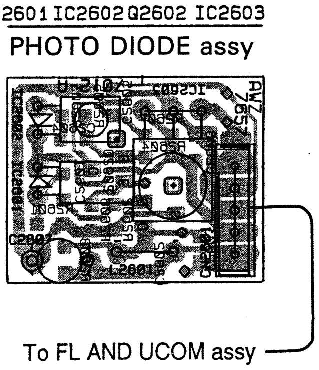
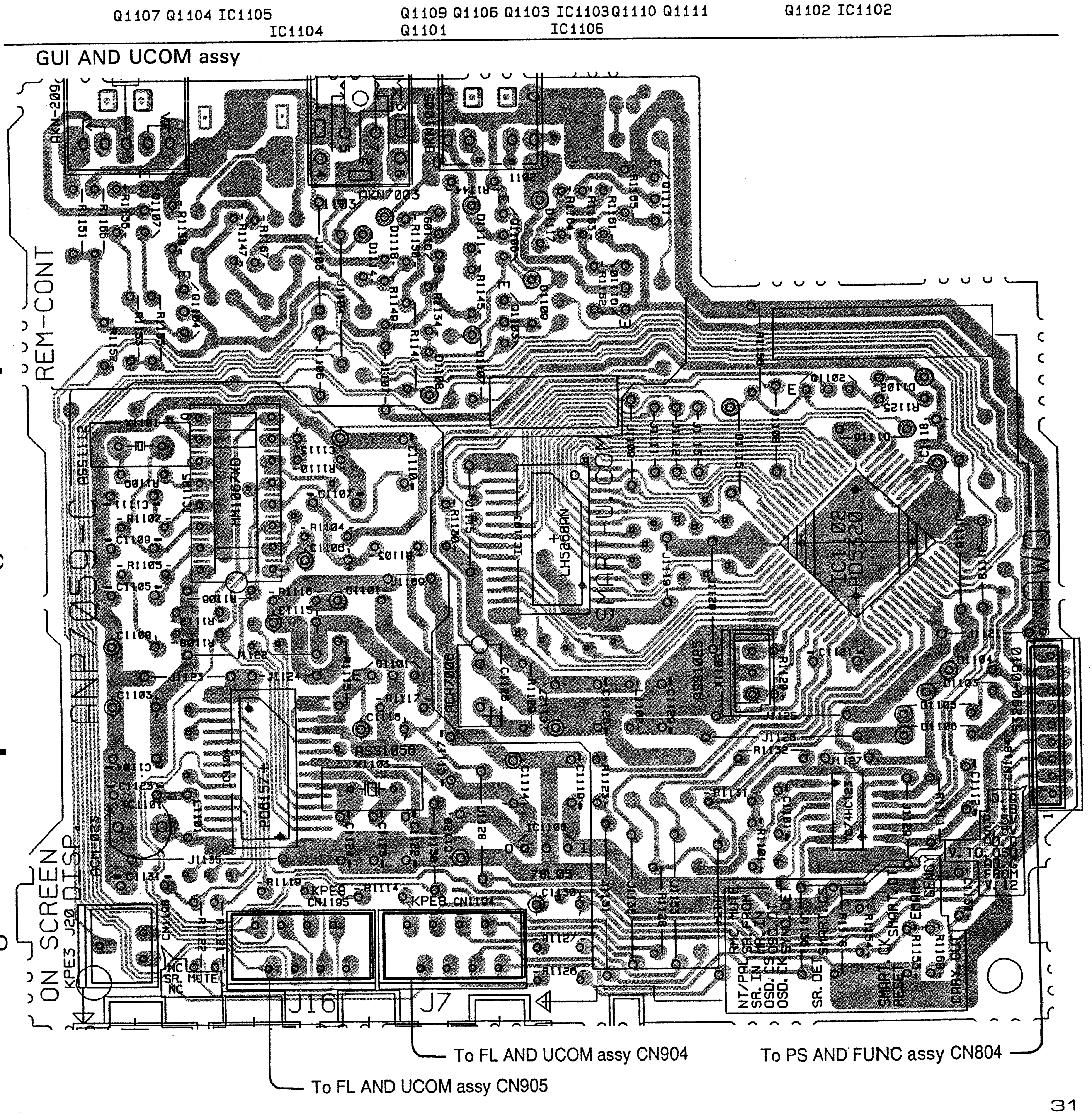

IC2502 IC2501 IC2504
C2501
L2501
IC2501
CN2501
C2505
C2504
CN2502
AWZ7658
AWX
To FL AND UCOM assy
To FL AND UCOM assy

PHOTO DIODE assy


IC2601 IC2602 Q2602 IC2603
C2601
L2601
AWZ
To FL AND UCOM assy

GUI AND UCOM assy


Q1107 Q1104 IC1105
IC1104
Q1109 Q1106 Q1103 IC1103 Q1110 Q1111
Q1101
IC1106
Q1102 IC1102
AKN-209
AKN7003
REM-CONT
ASS1112
MN1067W0
X1101
IC1102
PQ5320
LH5268AN
SMART-U-COM
ASS1025
X1102
ACH7006
ASS1058
X1103
IC1104
PQ8157
TC74HC123
ACM-025
78L05
IC1100
ON SCREEN DISP
KPE3 J20
KPE8 CN1195
KPE8 CN1194
J16
J7
NC SR. MUTE NC
NT/PAL
SR. IN
OSD. CS
OSD. CK
RMC. MUTE
SR. FROM
MR. IN
SYNC. DET
SR. DET
SMART. CS
SMART. CK
RESET
ENBA
SENC
CARY. OUT
5335Z-0910
CN1184
To FL AND UCOM assy CN904
To FL AND UCOM assy CN905
To PS AND FUNC assy CN804

- This diagram is viewed from the foil side.

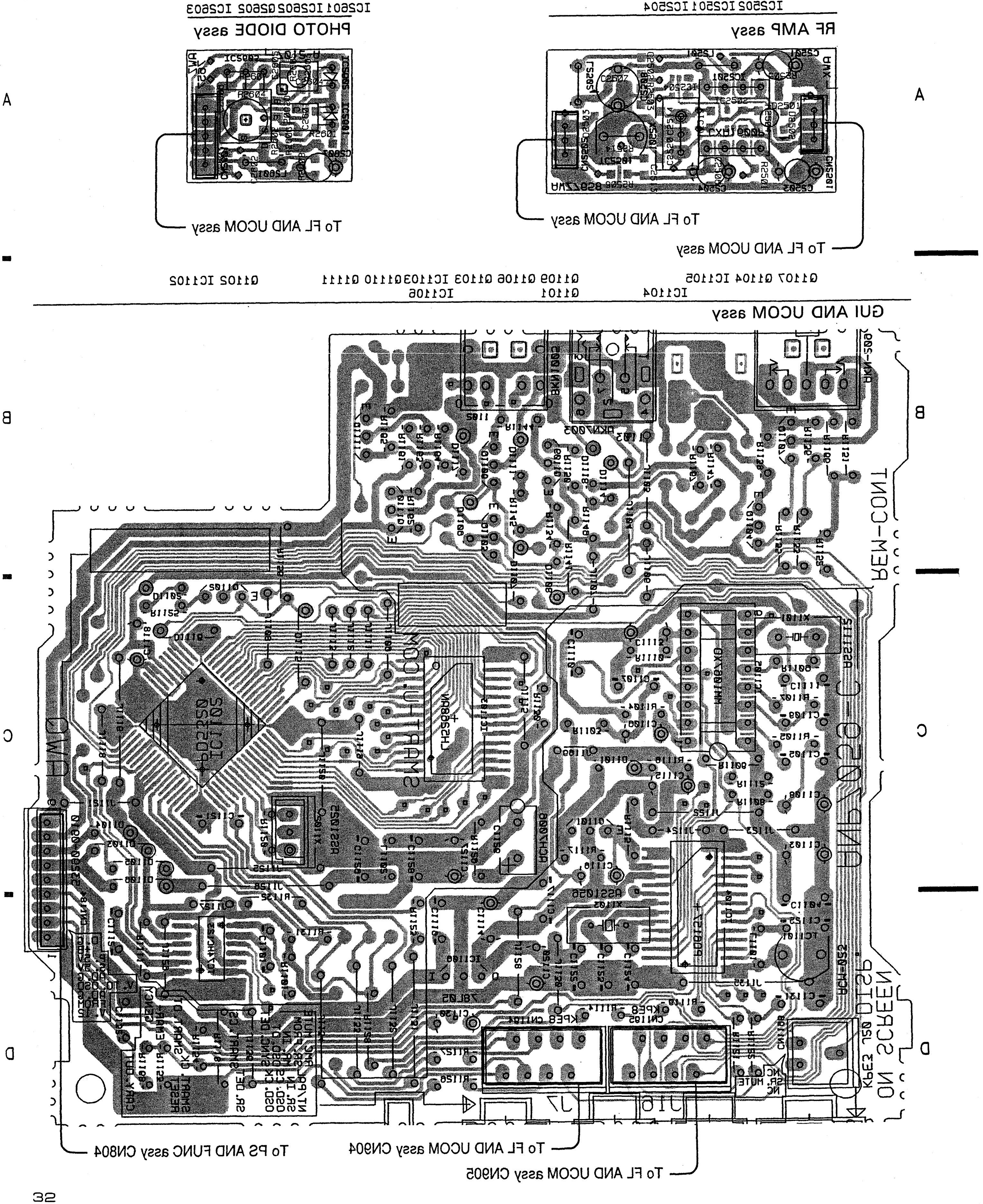


PHOTO DIODE assy
IC2601 IC2602 Q2602 IC2603
RF AMP assy
IC2502 IC2501 IC2504
To FL AND UCOM assy
To FL AND UCOM assy
To FL AND UCOM assy
GUI AND UCOM assy
Q1107 Q1104 IC1105
IC1104
Q1109 Q1106 Q1103 IC1103 Q1110 Q1111
Q1101
IC1106
Q1102 IC1102
REM-CONT
ON SCREEN
To PS AND FUNC assy CN804
To FL AND UCOM assy CN904
To FL AND UCOM assy CN905
A
B
C
D
1
2
3

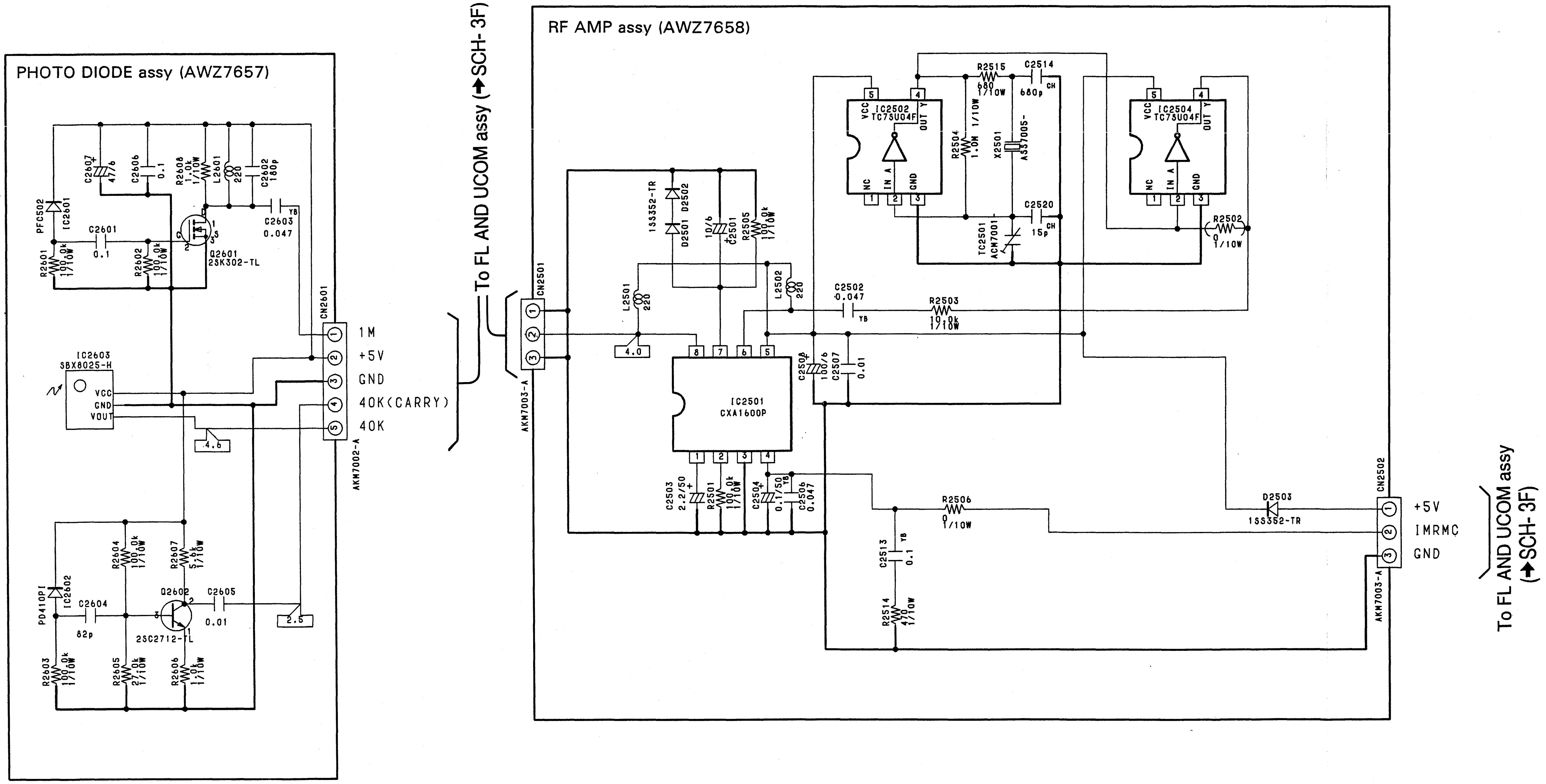
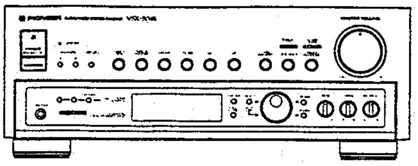


PHOTO DIODE assy (AWZ7657)
RF AMP assy (AWZ7658)
To FL AND UCOM assy (➔SCH-3F)
To FL AND UCOM assy (➔SCH-3F)
PFC502
IC2601
C2607 47/6
C2606 0.1
R2608 1.0k 1/10W
L2601 220
C2602 180p
C2603 0.047
YB
C2601 0.1
R2601 100.0k 1/10W
R2602 100.0k 1/10W
Q2601 2SK302-TL
CN2601
IC2603 SBX8025-H
VCC
GND
VOUT
4.6
1M
+5V
GND
40K(CARRY)
40K
AKM7002-A
PD410PI
IC2602
C2604 82p
R2604 100.0k 1/10W
R2607 5.6k 1/10W
Q2602 2SC2712-L
C2605 0.01
2.5
R2603 100.0k 1/10W
R2605 27.0k 1/10W
R2606 1.0k 1/10W
CN2501
AKM7003-A
1SS352-TR
D2502
D2501
10/6 C2501
R2505 100.0k 1/10W
L2501 220
L2502 220
4.0
C2502 0.047
YB
R2503 10.0k 1/10W
C2505 100/6
C2507 0.01
IC2501 CXA1600P
C2503 2.2/50
R2501 100.0k 1/10W
C2504 0.1/50
C2506 0.047
YB
R2515 680 1/10W
C2514 680p CH
IC2502 TC7SU04F
VCC
OUT Y
NC
IN A
GND
R2504 1.0M 1/10W
X2501 ASS7005-
C2520 15p CH
TC2501 ACM7001-
IC2504 TC7SU04F
R2502 0 1/10W
R2506 0 1/10W
C2513 0.1 YB
R2514 470 1/10W
D2503 1SS352-TR
CN2502
AKM7003-A
+5V
IMRMC
GND

PIONEER®
The Art of Entertainment

PION - 04813

Service Manual



ORDER NO.
RRV1248

AUDIO/VIDEO STEREO RECEIVER

VSX-504S
VSX-464S
VSX-454

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model			Power Requirement	Remarks
	VSX−504S	VSX−464S	VSX−454		
KUXJ	○	—	○	AC120V	
KCXJ	○	○	○	AC120V	

- **The " S " at the end of the model number indicates that a programable remote control unit is supplied.**

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4813

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T−DFF FEB. 1995 Printed in Japan

1. SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).

When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

NOTICE

(FOR CANADIAN MODEL ONLY)

Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE

(POUR MODÈLE CANADIEN SEULEMENT)

Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

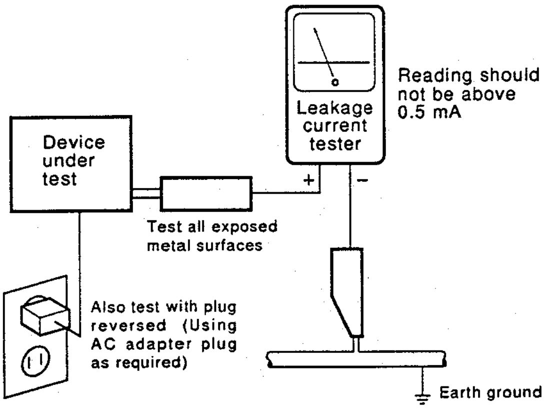
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60 Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5 mA.


Reading should not be above 0.5 mA
Leakage current tester
Device under test
Test all exposed metal surfaces
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage , etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

2. EXPLODED VIEWS, PACKING AND PARTS LIST

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

2.1 PACKING

■ CONTRAST OF VSX−504S/KUXJ, KCXJ, VSX−454/KUXJ, KCXJ AND VSX−464S/KCXJ

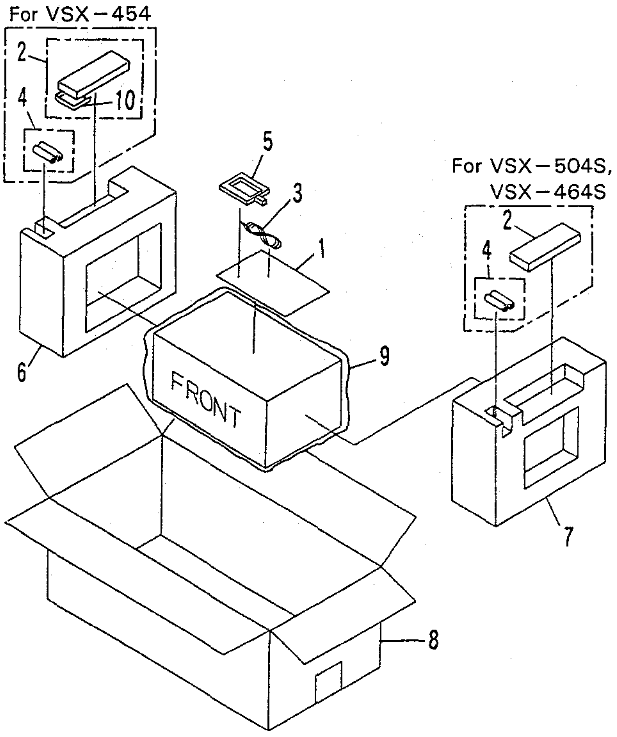
VSX−504S/KUXJ, KCXJ, VSX−454/KUXJ, KCXJ and VSX−464S/KCXJ have the same construction except for the following:

Mark	No.	Description	Part No.					Remarks
			VSX−504S		VSX−454		VSX−464S	
			KUXJ	KCXJ	KUXJ	KCXJ	KCXJ	
	1	Operating instructions (English)	ARB7023	ARB7023	ARB7024	Not used	Not used	
	1	Operating instructions (French)	Not used	ARC7033	Not used	Not used	Not used	
	1	Operating instructions (English/French)	Not used	Not used	Not used	ARE7022	ARE7022	
	2	Remote control unit (CU−VSX095)	AXD7045	AXD7045	Not used	Not used	Not used	*
	2	Remote control unit (CU−VSX098)	Not used	Not used	Not used	Not used	AXD7056	*
	2	Remote control unit (CU−VSX093)	Not used	Not used	AXD7046	AXD7046	Not used	
	10	Battery cover	Not used	Not used	AZA7031	AZA7031	Not used	
NSP	4	Battery (LR03, AAA)	AEX1006	AEX1006	Not used	Not used	AEX1006	
NSP	4	Battery (R6P, AA)	Not used	Not used	VEM−013	VEM−013	Not used	
	8	Packing case	AHD7110	AHD7110	AHD7113	AHD7113	AHD7114	

*Note *: Refer to "10. REMOTE CONTROL UNIT".*

■ PARTS LIST FOR VSX−504S/KUXJ

Mark	No.	Description	Parts No.
	1	OPERATING INSTRUCTIONS (English)	ARB7023
	2	REMOTE CONTROL UNIT (CU−VSX095)	AXD7045
	3	FM ANTENNA	ADH1017
NSP	4	BATTERY (LR03 ,AAA)	AEX1006
	5	LOOP ANTENNA	ATB7004
	6	SIDE PAD L	AHA7044
	7	SIDE PAD R	AHA7045
	8	PACKING CASE	AHD7110
	9	PACKING SHEET	AHG7010



2.2 EXTERIOR

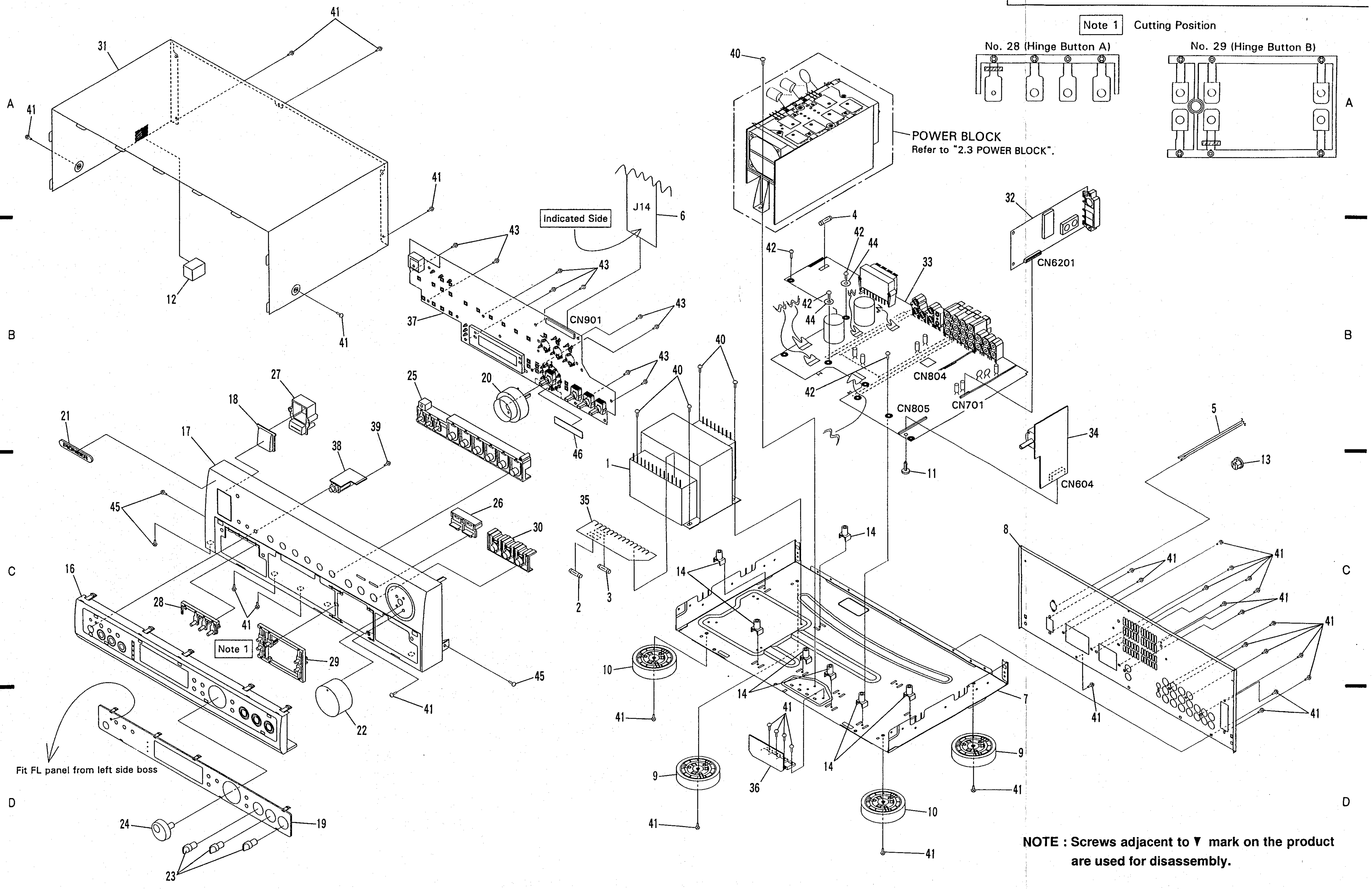
■ CONTRAST OF VSX−504S/KUXJ, KCXJ, VSX−454/KUXJ, KCXJ AND VSX−464S/KCXJ

VSX−504S/KUXJ, KCXJ, VSX−454/KUXJ, KCXJ and VSX−464S/KCXJ have the same construction except for the following:

Mark	No.	Description	Part No.					Remarks
			VSX−504S		VSX−454		VSX−464S	
			KUXJ	KCXJ	KUXJ	KCXJ	KCXJ	
	33	PS AND FUNC assy	AWZ7597	AWZ7597	AWZ7601	AWZ7601	AWZ7601	
	37	FL AND UCOM assy	AWZ7599	AWZ7599	AWZ7603	AWZ7603	AWZ7603	
⚠	1	Power transformer (AC120V, T1)	ATS7049	ATS7049	ATS7048	ATS7052	ATS7052	
⚠	4	Fuse (10A, FU1)	REK1087	REK1087	Not used	Not used	Not used	
⚠	4	Fuse (8A, FU1)	Not used	Not used	REK1086	REK1086	REK1086	
	8	Rear panel	ANC7172	ANC7172	ANC7200	ANC7199	ANC7202	
	16	Sub panel	AAP7011	AAP7011	AAP7012	AAP7012	AAP7012	
	17	Front panel	AMB7177	AMB7177	AMB7179	AMB7179	AMB7180	
	19	FL panel	AAK7125	AAK7125	AAK7126	AAK7126	AAK7126	
	28	Hinge button A	AAD7159	AAD7159	Not used	Not used	Not used	

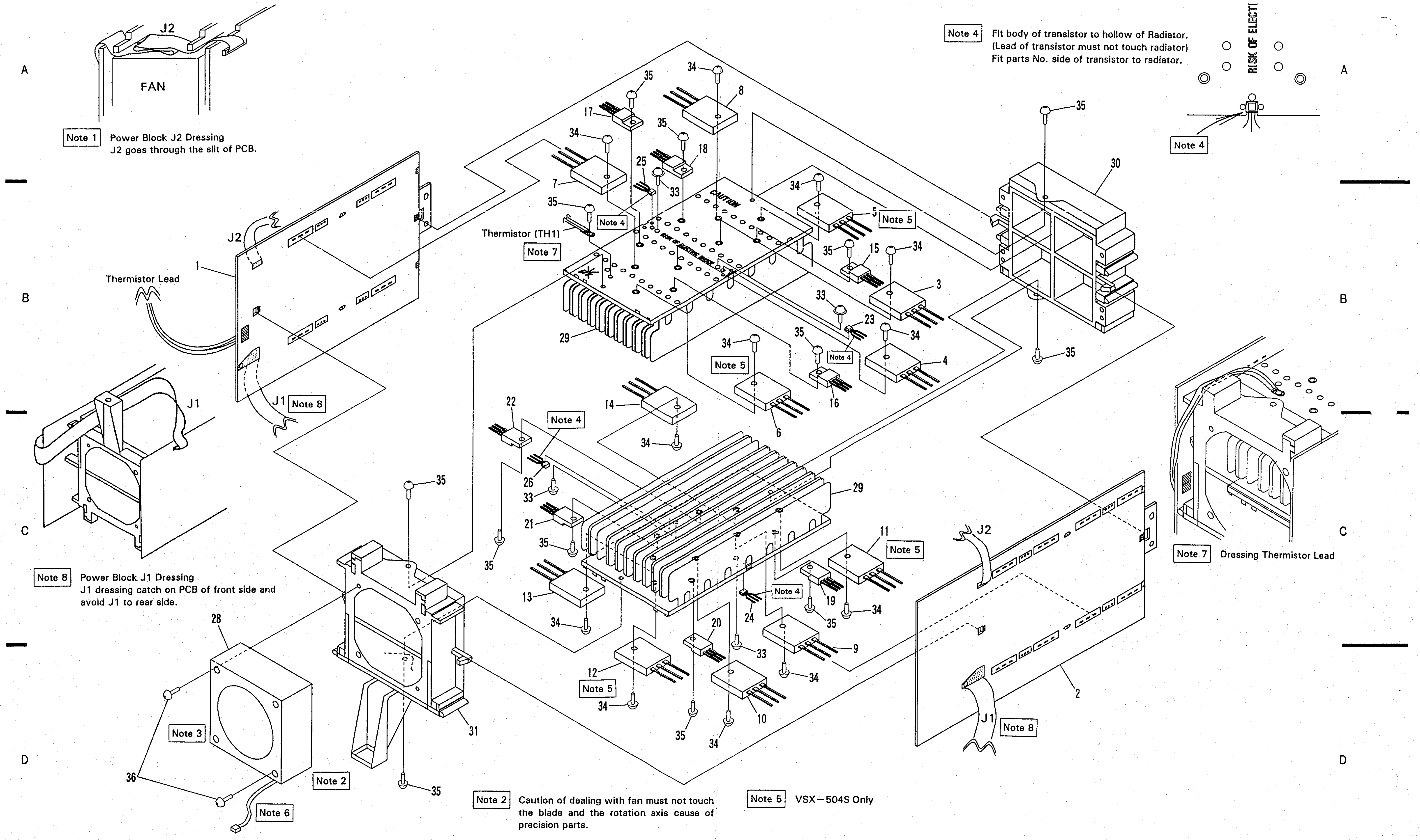
■ PARTS LIST FOR VSX−504S/KUXJ

Mark	No.	Description	Parts No.
⚠	1	POWER TRANSFORMER (T1)	ATS7049
⚠	2	FUSE (1.25A, FU3)	REK1076
⚠	3	FUSE (1.25A, FU4)	REK1076
⚠	4	FUSE (10A, FU1)	REK1087
⚠	5	AC POWER CORD	PDG1015
	6	FLEXIBLE CABLE (J14)	ADD7005
NSP	7	CHASSIS	ANA7016
	8	REAR PANEL	ANC7172
	9	INSULATOR ASSY	DXA1490
	10	INSULATOR	PNW1912
	11	PCB SUPPORT	AEC1581
	12	RUBBER SPACER	AEC7034
	13	CORD STOPPER	AEP−113
	14	PCB MOLD	AMR2533
	15	…………………	
	16	SUB PANEL	AAP7011
	17	FRONT PANEL	AMB7177
	18	IR FILTER	AAK7123
	19	FL PANEL	AAK7125
	20	JOG RING	AAK7129
	21	NAME PLATE	PAM1608
	22	ROUND KNOB L	AAB1390
	23	ROUND KNOB S	AAB7047
	24	JOG KNOB	AAB7048
	25	FUNCTION BUTTON	AAD7156
	26	ILLUMI BUTTON	AAD7157
	27	POWER BUTTON	AAD7158
	28	HINGE BUTTON A	AAD7159
	29	HINGE BUTTON B	AAD7160
	30	SURROUND BUTTON	AAD7161
	31	BONNET CASE	ANE7047
	32	FM/AM TUNER MODULE	AXQ3112
	33	PS AND FUNC ASSY	AWZ7597
	34	VOL. ASSY	AWZ7602
NSP	35	TRANS ASSY	AWZ7591
	36	REG. ASSY	AWZ7592
	37	FL AND UCOM ASSY	AWZ7599
NSP	38	H.P. ASSY	AWZ7594
	39	SCREW	ABA7009
	40	SCREW	ABA1147
	41	SCREW	BBZ30P080FZK
	42	SCREW	BBZ30P200FMC
	43	SCREW	BPZ26P080FMC
NSP	44	WASHER	AEE7002
	45	SCREW	BBZ30P080FMC
NSP	46	ADHESIVE DOUBLE COATED TAPE	AEH1025


Note 1
Cutting Position
No. 28 (Hinge Button A)
No. 29 (Hinge Button B)
POWER BLOCK
Refer to "2.3 POWER BLOCK".
Indicated Side
J14
CN901
CN6201
CN804
CN805
CN701
CN604
Note 1
Fit FL panel from left side boss
1
2
3
4
5
6
7
8
9
10
11
12
13
14
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
A
B
C
D

NOTE : Screws adjacent to ▼ mark on the product are used for disassembly.

2.3 POWER BLOCK


J2
FAN
J2
1
Thermistor Lead
J1
J1
Note 8
Thermistor (TH1)
Note 7
Note 4
CAUTION
RISK OF ELECTRIC SHOCK
35
34
8
17
35
18
34
25
33
7
35
34
5
Note 5
35
15
34
3
29
33
23
35
Note 4
34
4
34
Note 5
16
6
14
34
22
Note 4
26
33
21
35
35
35
29
13
34
11
Note 5
Note 4
19
24
34
35
20
33
9
12
Note 5
34
10
35
34
34
35
30
35
35
Note 4
RISK OF ELECT
J2
2
J1
Note 8
Note 7
28
Note 3
36
Note 2
Note 6
31
35
A
B
C
D
3
4
5
6

Note 1 Power Block J2 Dressing
J2 goes through the slit of PCB.

Note 4 Fit body of transistor to hollow of Radiator.
(Lead of transistor must not touch radiator)
Fit parts No. side of transistor to radiator.

Note 7 Dressing Thermistor Lead

Note 8 Power Block J1 Dressing
J1 dressing catch on PCB of front side and avoid J1 to rear side.

Note 2 Caution of dealing with fan must not touch the blade and the rotation axis cause of precision parts.

Note 5 VSX−504S Only

Note 3 Set side without fan guard facing out side
(The other side of parts No. side).

Note 6 Install fan motor to do right-down fan lead.

CONTRAST OF VSX−504S/KUXJ, KCXJ, VSX−454/KUXJ, KCXJ AND VSX−464S/KCXJ

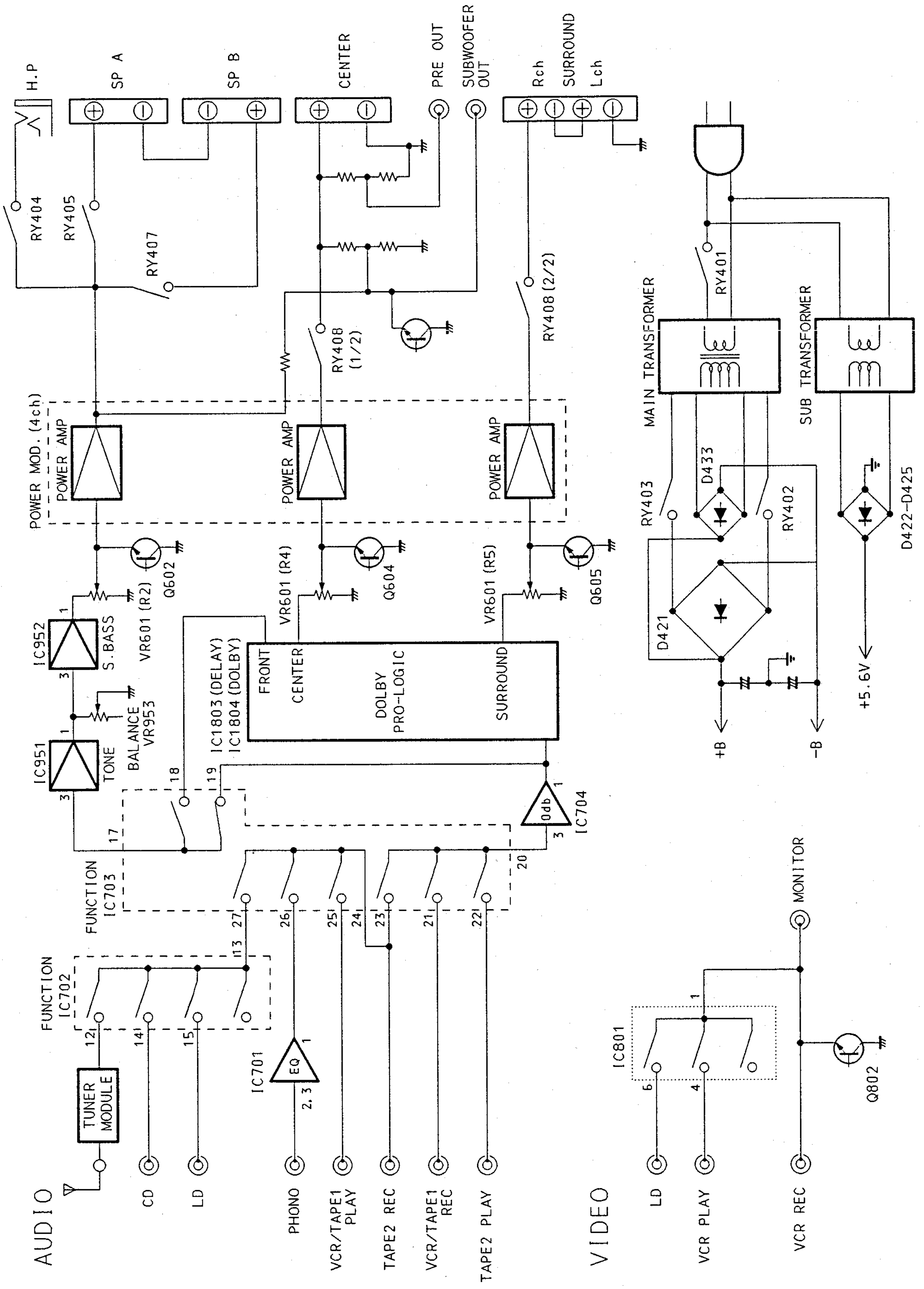
VSX−504S/KUXJ, KCXJ, VSX−454/KUXJ, KCXJ and VSX−464S/KCXJ have the same construction except for the following:

Mark	No.	Description	Part No.					Remarks
			VSX−504S		VSX−454		VSX−464S	
			KUXJ	KCXJ	KUXJ	KCXJ	KCXJ	
	2	AMP assy 200W	AWZ7581	AWZ7581	Not used	Not used	Not used	
	2	AMP assy 120W	Not used	Not used	AWZ7580	AWZ7580	AWZ7580	
⚠	5	Transistor (Q7)	2SA1302	2SA1302	Not used	Not used	Not used	
⚠	6	Transistor (Q8)	2SA1302	2SA1302	Not used	Not used	Not used	
⚠	11	Transistor (Q5)	2SC3281	2SC3281	Not used	Not used	Not used	
⚠	12	Transistor (Q6)	2SC3281	2SC3281	Not used	Not used	Not used	
NSP	29	Radiator	ANH7012	ANH7012	ANH7011	ANH7011	ANH7011	

PARTS LIST FOR VSX−504S/KUXJ

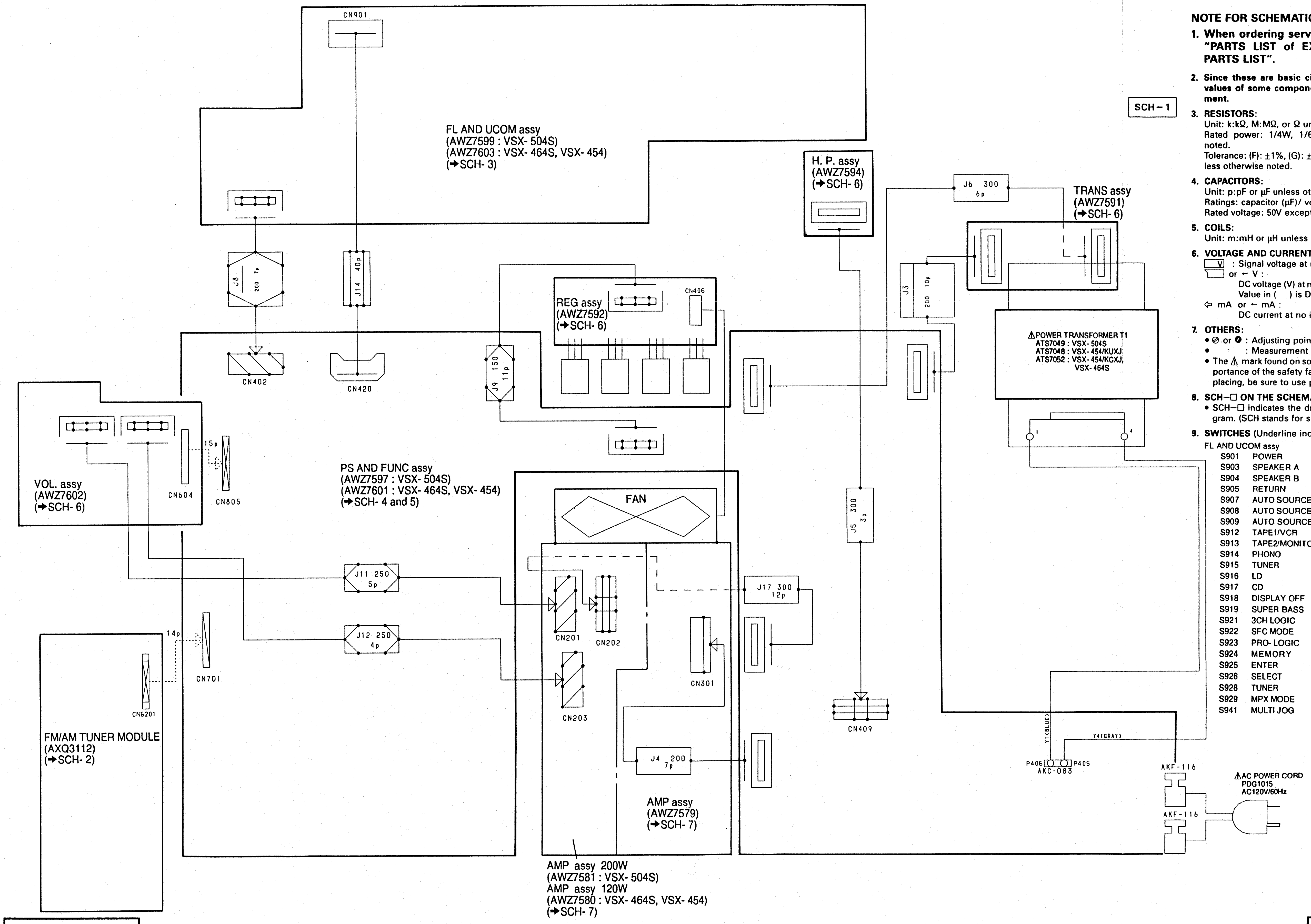
Mark	No.	Description	Parts No.
	1	AMP ASSY	AWZ7579
	2	AMP ASSY 200W	AWZ7581
⚠	3	TRANSISTOR (Q3)	2SA1302
⚠	4	TRANSISTOR (Q4)	2SA1302
⚠	5	TRANSISTOR (Q7)	2SA1302
⚠	6	TRANSISTOR (Q8)	2SA1302
⚠	7	TRANSISTOR (Q11)	2SA1302
⚠	8	TRANSISTOR (Q12)	2SA1302
⚠	9	TRANSISTOR (Q1)	2SC3281
⚠	10	TRANSISTOR (Q2)	2SC3281
⚠	11	TRANSISTOR (Q5)	2SC3281
⚠	12	TRANSISTOR (Q6)	2SC3281
⚠	13	TRANSISTOR (Q9)	2SC3281
⚠	14	TRANSISTOR (Q10)	2SC3281
⚠	15	TRANSISTOR (Q23)	2SA1837
⚠	16	TRANSISTOR (Q24)	2SA1837
⚠	17	TRANSISTOR (Q33)	2SA1837
⚠	18	TRANSISTOR (Q34)	2SA1837
⚠	19	TRANSISTOR (Q21)	2SC4793
⚠	20	TRANSISTOR (Q22)	2SC4793
⚠	21	TRANSISTOR (Q31)	2SC4793
⚠	22	TRANSISTOR (Q32)	2SC4793
⚠	23	TRANSISTOR (Q209)	2SC1740S
⚠	24	TRANSISTOR (Q210)	2SC1740S
⚠	25	TRANSISTOR (Q309)	2SC1740S
⚠	26	TRANSISTOR (Q310)	2SC1740S
	27	....	
	28	FAN MOTOR	AXM7005
NSP	29	RADIATOR	ANH7012
	30	EXHAUST MOLD	AMR7035
	31	RADIATOR MOLD	AMR7036
	32	....	
	33	SCREW	ABA−283
	34	SCREW	ABA1037
	35	SCREW	BBZ30P080FZK
	36	SCREW	BPZ30P350FZK

3. BLOCK DIAGRAM


H.P
SP A
SP B
CENTER
PRE OUT
SUBWOOFER OUT
Rch
SURROUND
Lch
RY404
RY405
RY407
RY408 (1/2)
RY408 (2/2)
RY401
MAIN TRANSFORMER
SUB TRANSFORMER
POWER MOD. (4ch)
POWER AMP
POWER AMP
POWER AMP
RY403
D433
RY402
D422–D425
D421
Q602
Q604
Q605
VR601 (R2)
VR601 (R4)
VR601 (R5)
IC952
S.BASS
IC951
TONE
BALANCE
VR953
IC1803 (DELAY)
IC1804 (DOLBY)
FRONT
CENTER
DOLBY PRO-LOGIC
SURROUND
+B
-B
+5.6V
IC704
0db
FUNCTION
IC703
FUNCTION
IC702
IC701
EQ
TUNER MODULE
MONITOR
IC801
Q802
AUDIO
CD
LD
PHONO
VCR/TAPE1 PLAY
TAPE2 REC
VCR/TAPE1 REC
TAPE2 PLAY
VIDEO
LD
VCR PLAY
VCR REC
1
3
1
3
17
18
19
20
1
3
27
26
25
24
23
21
22
13
12
14
15
1
2, 3
1
6
4

4. SCHEMATIC AND PCB CONNECTION DIAGRAMS

4.1 OVERALL SCHEMATIC DIAGRAM


CN901
FL AND UCOM assy
(AWZ7599 : VSX- 504S)
(AWZ7603 : VSX- 464S, VSX- 454)
(➔SCH- 3)
H. P. assy
(AWZ7594)
(➔SCH- 6)
J6 300 6p
TRANS assy
(AWZ7591)
(➔SCH- 6)
J8 200 7p
J14 40p
REG assy
(AWZ7592)
(➔SCH- 6)
CN406
J3 200 10p
⚠POWER TRANSFORMER T1
ATS7049 : VSX- 504S
ATS7048 : VSX- 454/KUXJ
ATS7052 : VSX- 454/KCXJ, VSX- 464S
CN402
CN420
J9 150 11p
15p
VOL. assy
(AWZ7602)
(➔SCH- 6)
CN604
CN805
PS AND FUNC assy
(AWZ7597 : VSX- 504S)
(AWZ7601 : VSX- 464S, VSX- 454)
(➔SCH- 4 and 5)
FAN
J5 300 3p
J11 250 5p
J12 250 4p
CN201
CN202
J17 300 12p
14p
CN701
CN6201
CN203
CN301
CN409
FM/AM TUNER MODULE
(AXQ3112)
(➔SCH- 2)
J4 200 7p
Y1(BLUE)
Y4(GRAY)
P406
P405
AKC-083
AKF-116
AKF-116
⚠AC POWER CORD
PDG1015
AC120V/60Hz
AMP assy
(AWZ7579)
(➔SCH- 7)
AMP assy 200W
(AWZ7581 : VSX- 504S)
AMP assy 120W
(AWZ7580 : VSX- 464S, VSX- 454)
(➔SCH- 7)

SCH−1

NOTE FOR SCHEMATIC DIAGRAMS (Type 1A)

1. **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**
2. **Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.**
3. **RESISTORS:**
   Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
   Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
   Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
4. **CAPACITORS:**
   Unit: p:pF or µF unless otherwise noted.
   Ratings: capacitor (µF)/ voltage (V) unless otherwise noted.
   Rated voltage: 50V except for electrolytic capacitors.
5. **COILS:**
   Unit: m:mH or µH unless otherwise noted.
6. **VOLTAGE AND CURRENT:**
   ▭V : Signal voltage at rated output.
   ▭ or ← V :
   DC voltage (V) at no input signal unless otherwise noted.
   Value in ( ) is DC voltage at rated power.
   ⇦ mA or ← mA :
   DC current at no input signal unless otherwise noted.
7. **OTHERS:**
   - ⊘ or ⊘ : Adjusting point.
   - : Measurement point.
   - The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
8. **SCH−□ ON THE SCHEMATIC DIAGRAM:**
   - SCH−□ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)
9. **SWITCHES** (Underline indicates switch position):

FL AND UCOM assy

S901	POWER
S903	SPEAKER A
S904	SPEAKER B
S905	RETURN
S907	AUTO SOURCE CONTROL 1 (VSX- 504S ONLY)
S908	AUTO SOURCE CONTROL 2 (VSX- 504S ONLY)
S909	AUTO SOURCE CONTROL MEMORY (VSX- 504S ONLY)
S912	TAPE1/VCR
S913	TAPE2/MONITOR
S914	PHONO
S915	TUNER
S916	LD
S917	CD
S918	DISPLAY OFF
S919	SUPER BASS
S921	3CH LOGIC
S922	SFC MODE
S923	PRO- LOGIC
S924	MEMORY
S925	ENTER
S926	SELECT
S928	TUNER
S929	MPX MODE
S941	MULTI JOG

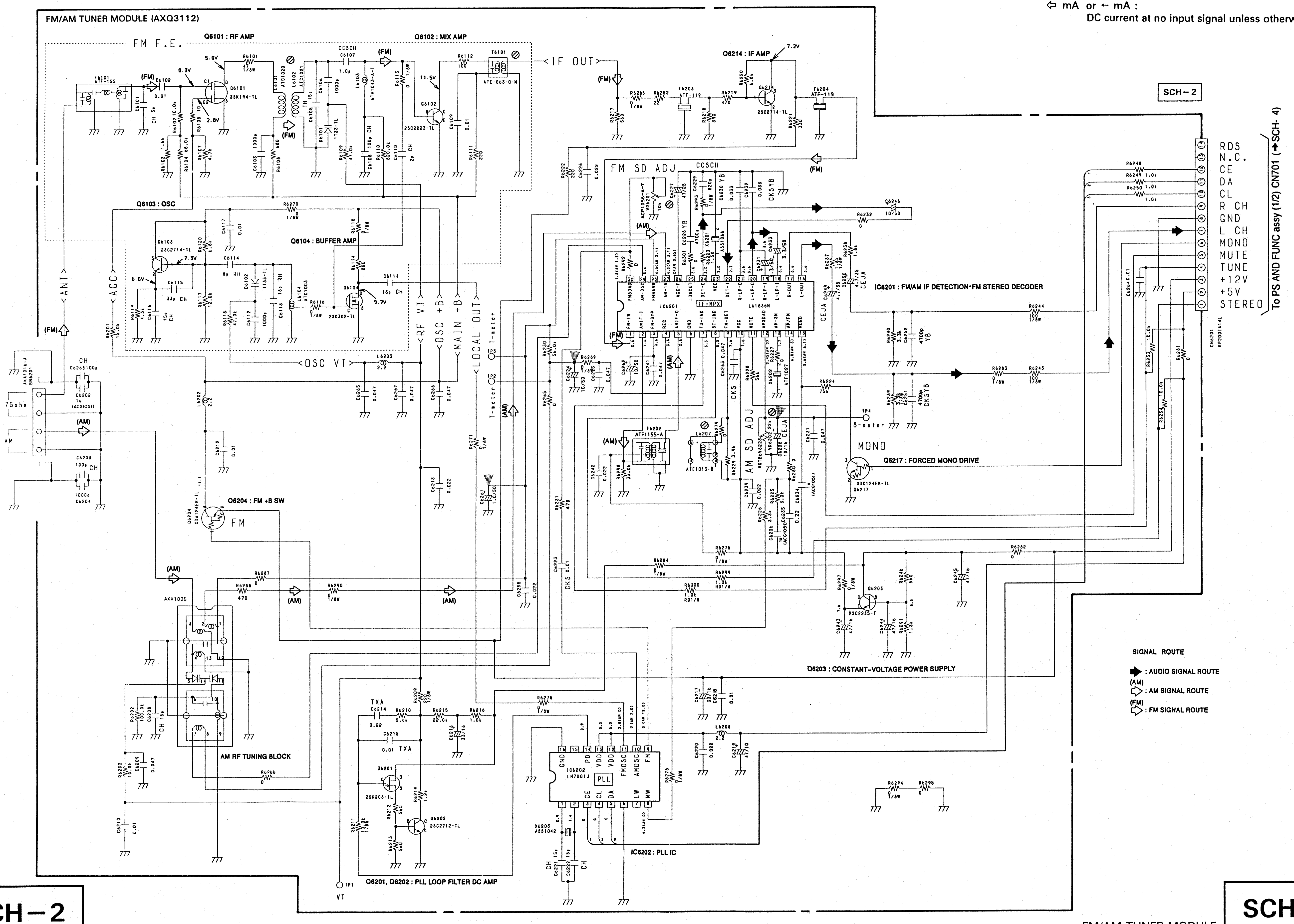
4.2 FM/AM TUNER MODULE

NOTE: VOLTAGE AND CURRENT

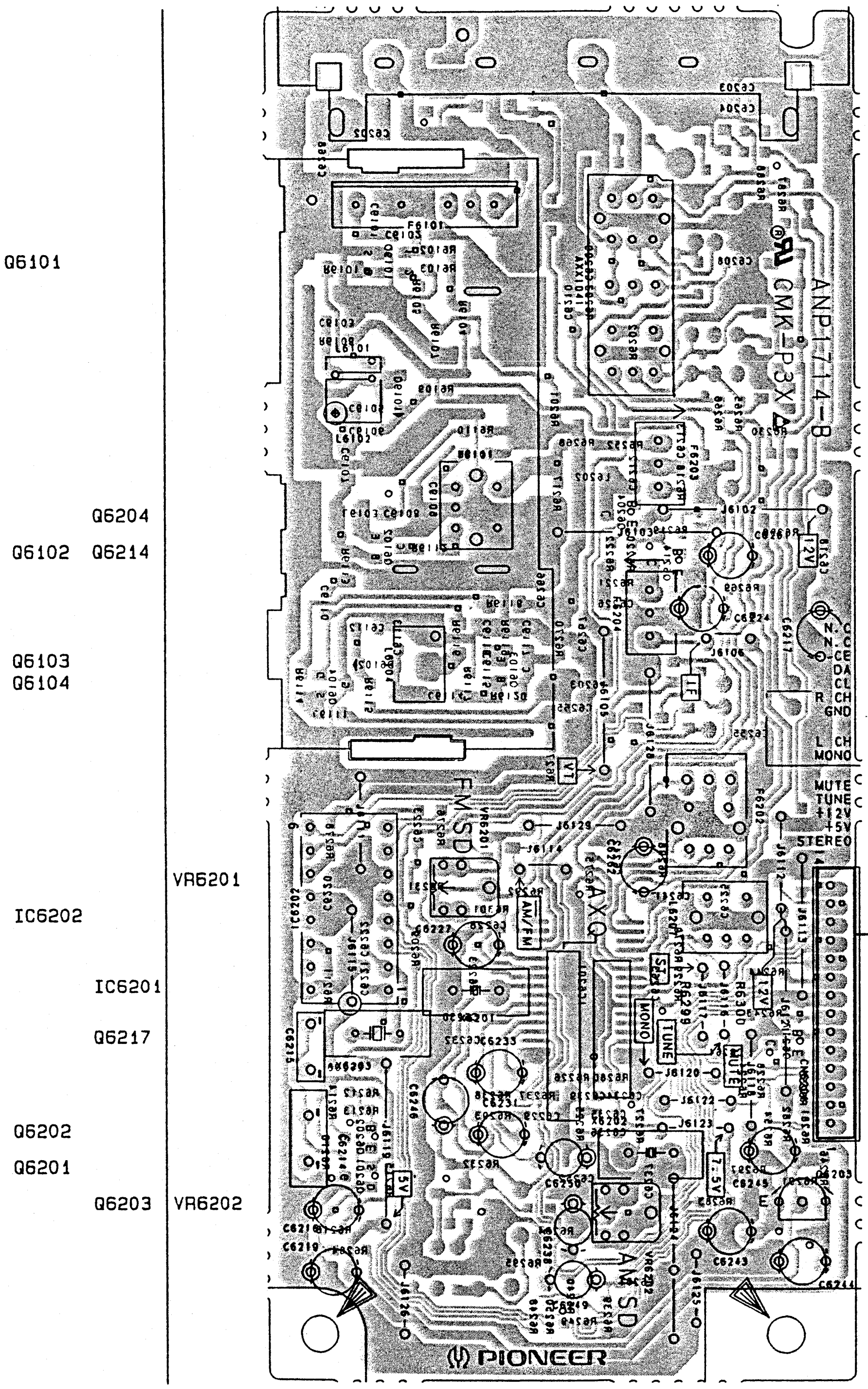
mV : Signal voltage at FM 1kHz, 100% MOD.

or ← V :
DC voltage (V) at no input signal unless otherwise noted.
Value in ( ) is DC voltage at rated power.

⇦ mA or ← mA :
DC current at no input signal unless otherwise noted.


FM/AM TUNER MODULE (AXQ3112)
FM F.E.
Q6101 : RF AMP
Q6102 : MIX AMP
Q6103 : OSC
Q6104 : BUFFER AMP
Q6214 : IF AMP
Q6204 : FM +B SW
Q6203 : CONSTANT-VOLTAGE POWER SUPPLY
Q6217 : FORCED MONO DRIVE
Q6201, Q6202 : PLL LOOP FILTER DC AMP
IC6201 : FM/AM IF DETECTION·FM STEREO DECODER
IC6202 : PLL IC
AM RF TUNING BLOCK
AXX1025
IF OUT
FM SD ADJ
AM SD ADJ
MONO
<ANT>
<ACC>
<OSC VT>
<RF VT>
<OSC +B>
<MAIN +B>
<LOCAL OUT>
T-meter
S-meter
FM 75ohm
AM
TP1 VT
TP2
TP3
TP4
SCH-2
RDS
N.C.
CE
DA
CL
R CH
GND
L CH
MONO
MUTE
TUNE
+12V
+5V
STEREO
To PS AND FUNC assy (1/2) CN701 (→SCH-4)
SIGNAL ROUTE
: AUDIO SIGNAL ROUTE
(AM) : AM SIGNAL ROUTE
(FM) : FM SIGNAL ROUTE

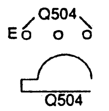
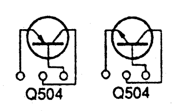
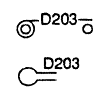
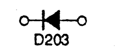
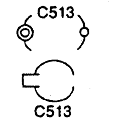
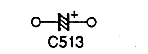
FM/AM TUNER MODULE


Q6101
Q6204
Q6102
Q6214
Q6103
Q6104
VR6201
IC6202
IC6201
Q6217
Q6202
Q6201
Q6203
VR6202
ANP1714-B
N.C
N.C
CE
DA
CL
R CH
GND
L CH
MONO
MUTE
TUNE
+12V
+5V
STEREO
FM SD
AM SD
AM/FM
MONO
TUNE
MUTE
12V
5V
7.5V
PIONEER

To PS AND FUNC assy CN701

NOTE FOR PCB DIAGRAMS:

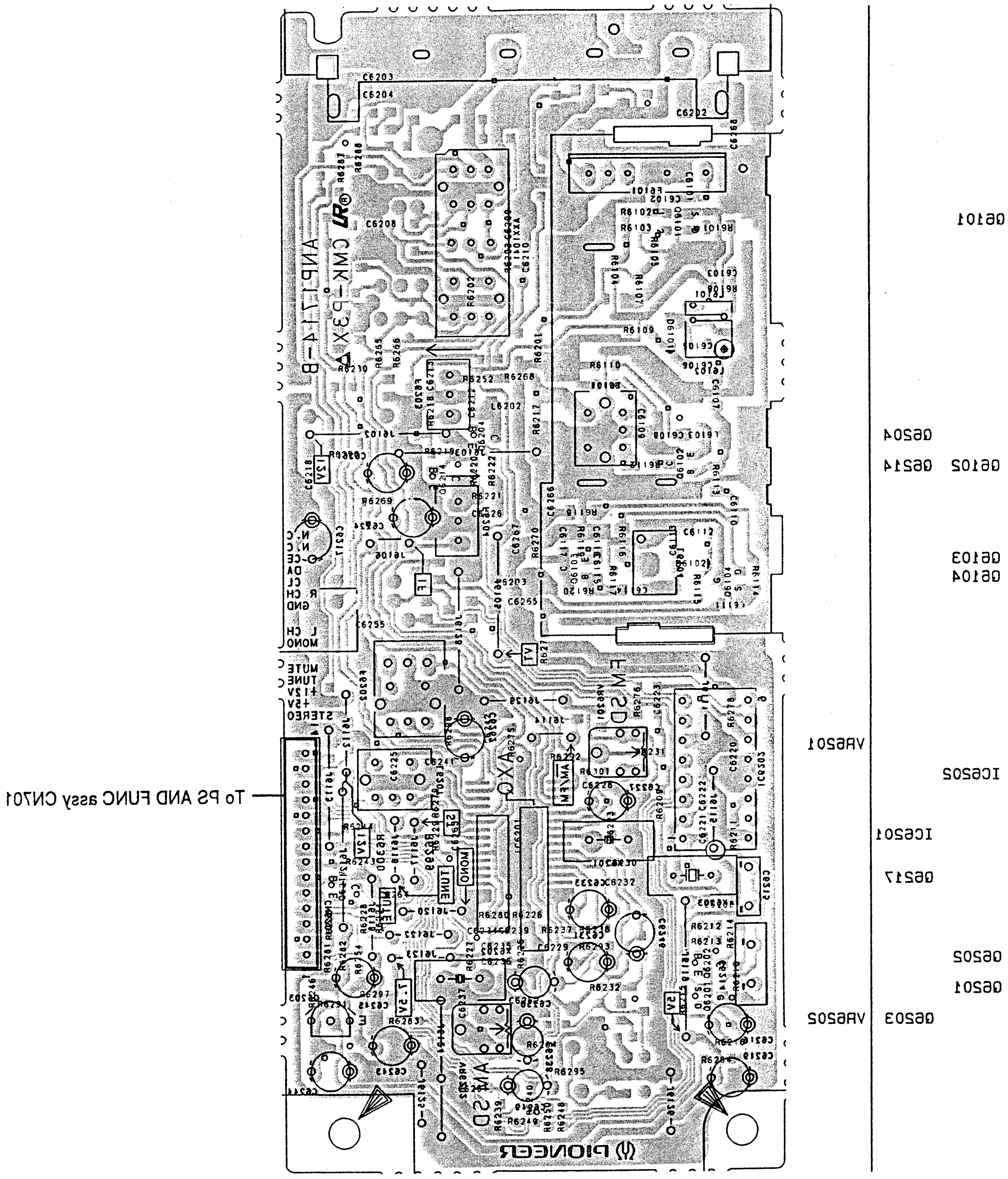
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Transistor
		Diode
		Capacitor (Polarized)

3. The transistor terminal marked with E or ⊏ shows the emitter.
4. The diode terminal marked with ◎ or ⊂ shows cathode side.
5. The capacitor terminal marked with ◎ or ⊏ shows negative terminal.

- This diagram is viewed from the mounted parts side.

FM/AM TUNER MODULE

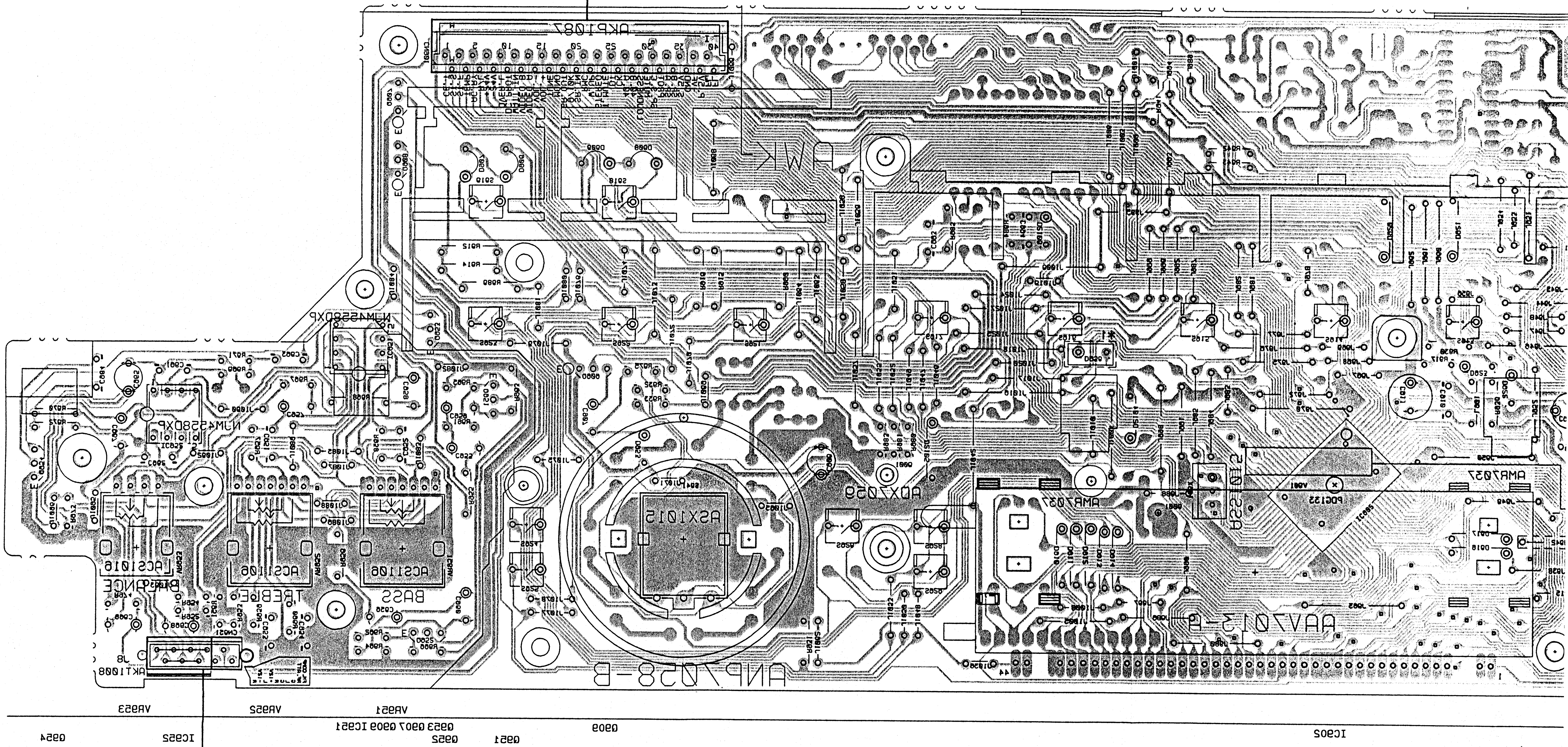

Q6101
Q6204
Q6102
Q6214
Q6103
Q6104
VR6201
IC6202
IC6201
Q6217
Q6202
Q6201
Q6203
VR6202
To PS AND FUNC assy CN701
ANP1714-B
CMK-P37XA
PIONEER
N.C
N.C
O-CE
DA
CL
R CH
GND
L CH
MONO
MUTE
TUNE
+12V
+5V
STEREO
12V
7.5V
5V
MONO
TUNE
MUTE
FM
AM
FM/AM
XA
C6203
C6204
C6202
C6208
C6218
C6255
F6101
R6101
R6109
R6110
R6201
R6217
R6270
R6268
L6202
R6269
R6239
R6295
R6232

• This diagram is viewed from the foil side.

PCB-2

✱1: VSX-504S/KUXJ, KCXJ ONLY

To PS AND FUNC assy CN420



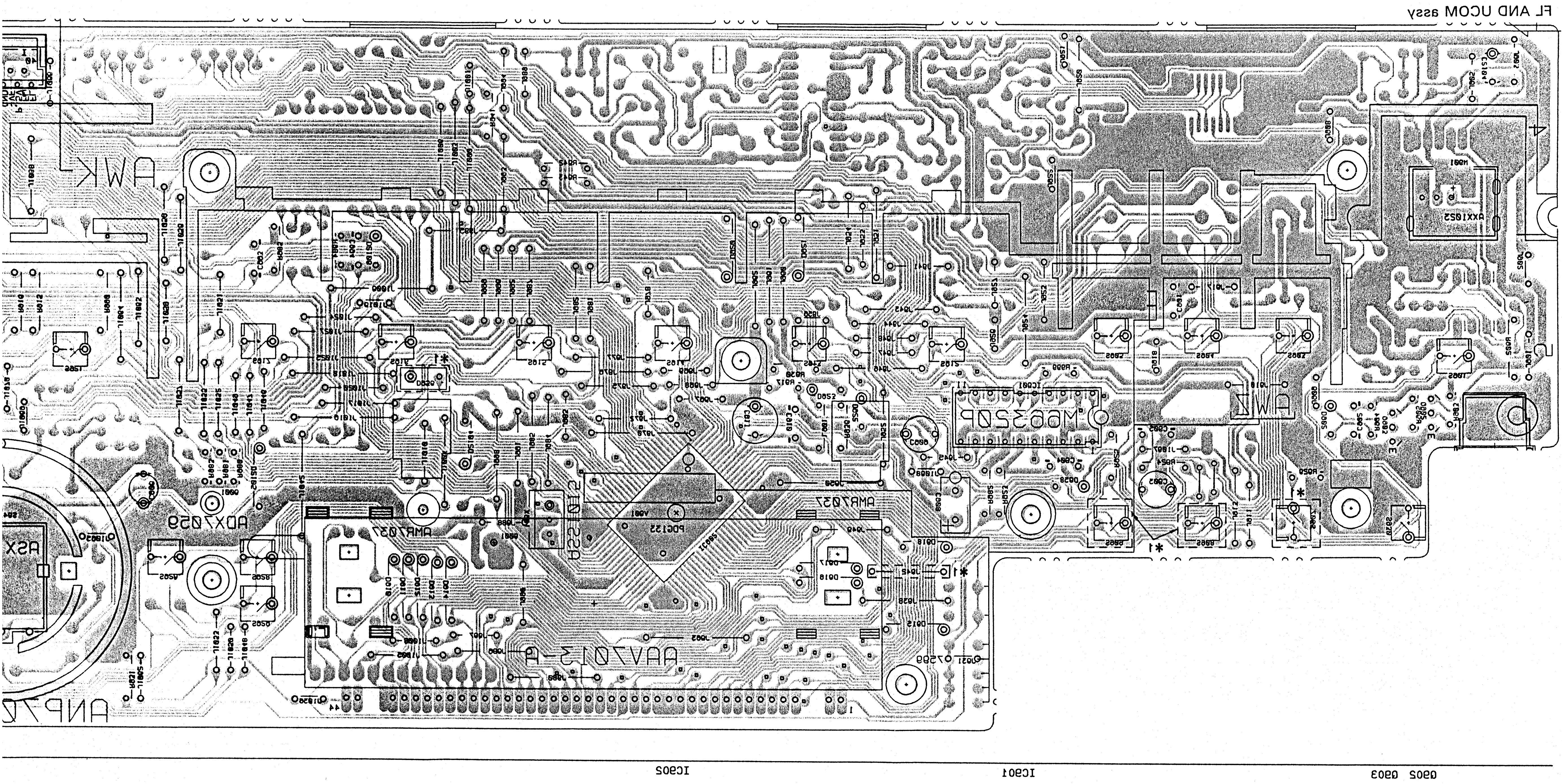
AKP1087
AWK
NJM4558DXP
ASX1015
ADX7059
AMR7037
PDG133
AAV7013-B
ANP7058-B
ACS1016
ACS1106
BALANCE
TREBLE
BASS
AKT1008
VR953
VR952
VR951
Q954
IC952
Q953 Q907 Q909 IC951
Q952
Q951
Q909
IC902

To PS AND FUNC assy CN402

- This diagram is viewed from the foil side.

4.3 FL AND UCOM ASSY

*1: VSX-504S/KUXJ, KCXJ ONLY


FL AND UCOM assy
AWK
ADX7059
AMR7037
AAV7013-A
PDG133
M66320P
AXX1025
ANP7
IC902
IC901
Q902 Q903

- This diagram is viewed from the foil side.

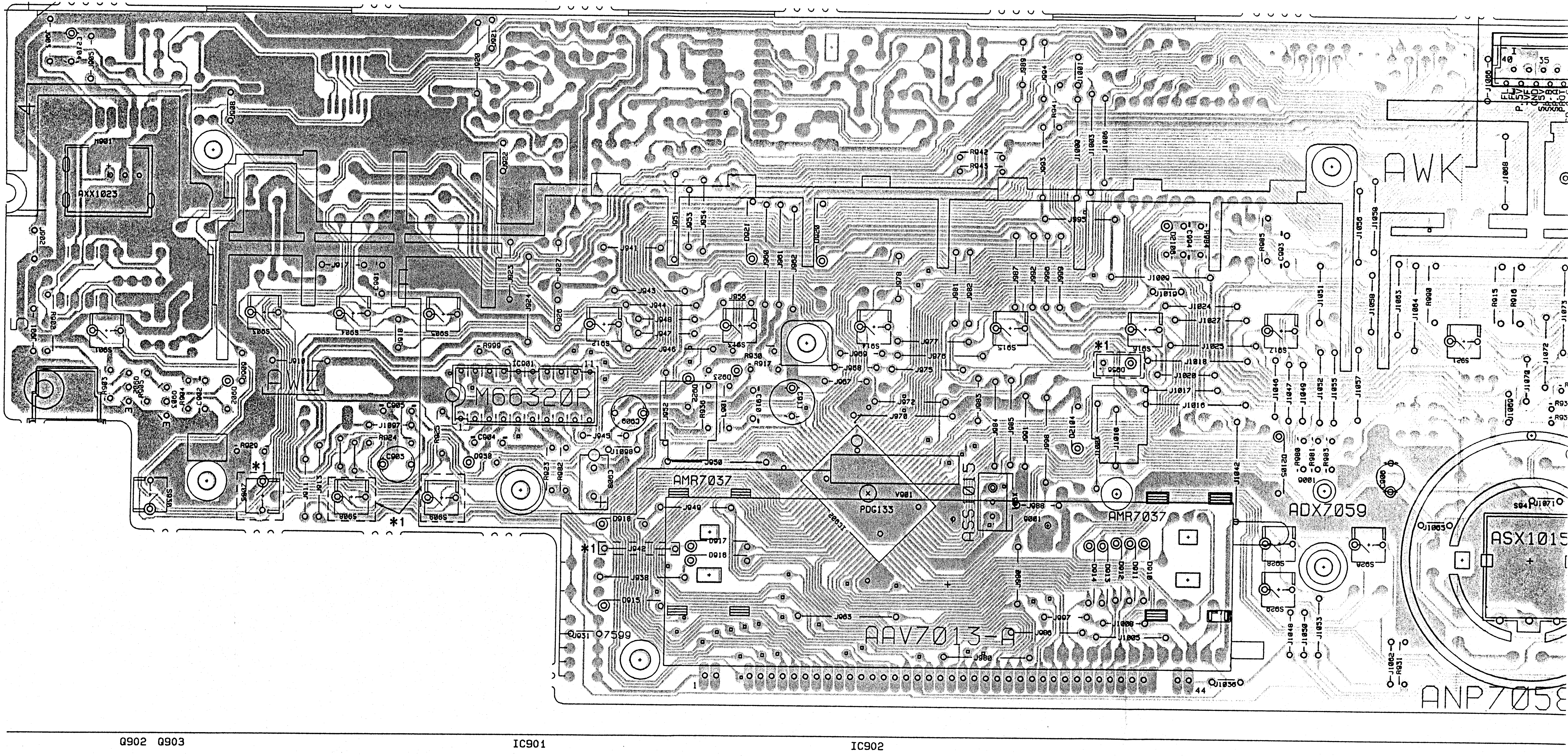
4.3 FL AND UCOM ASSY

*1: VSX- 504S/KUXJ, KCXJ ONLY

A

FL AND UCOM assy

B


AXX1023
AWZ
M66320P
IC001
AMR7037
PDG133
V901
ASS1015
AMR7037
AAV7013-A
7599
ADX7059
AWK
ASX1015
ANP7058
*1
Q902 Q903
IC901
IC902

C

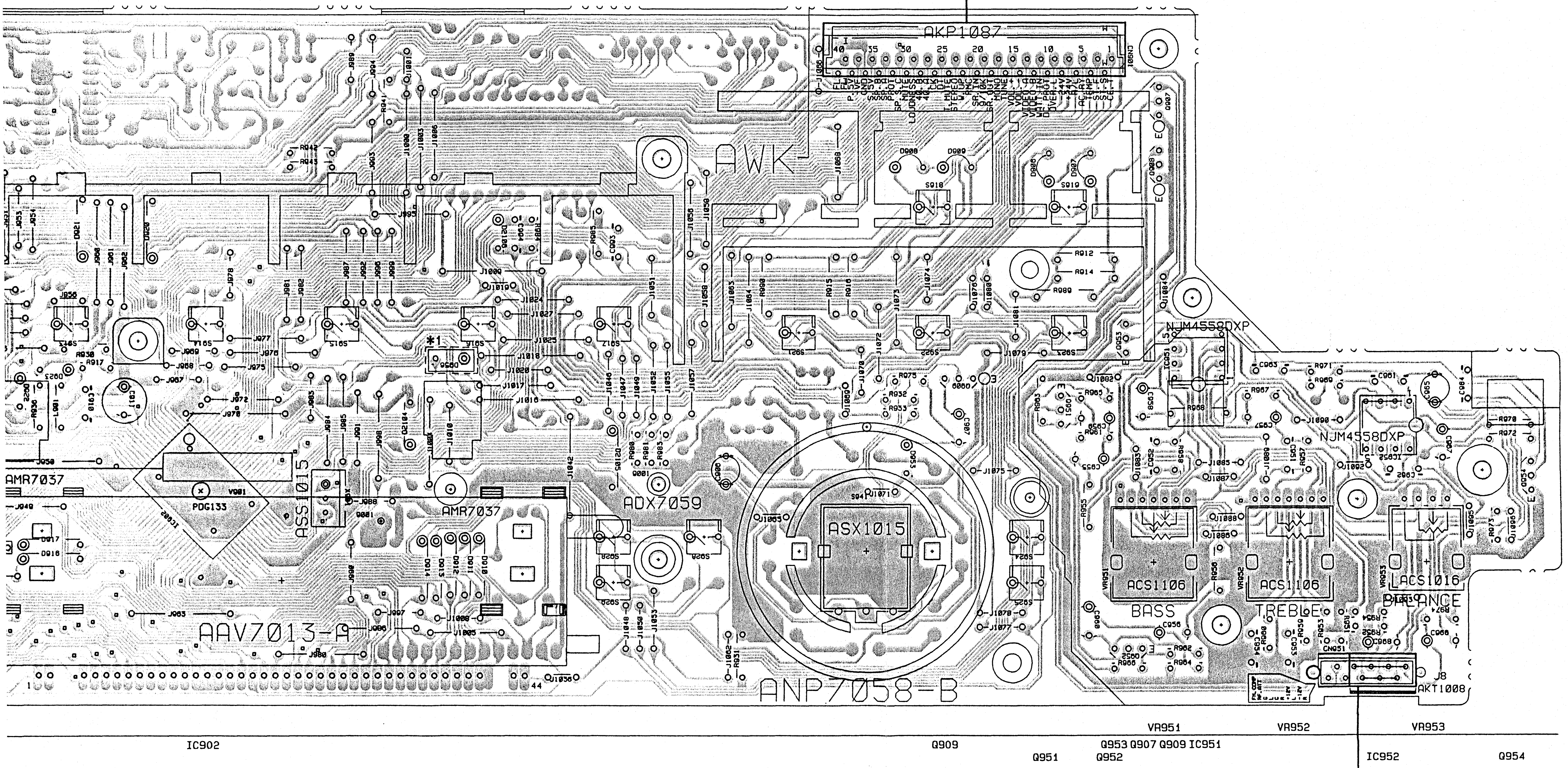
D

- This diagram is viewed from the mounted parts side.

*1: VSX- 504S/KUXJ, KCXJ ONLY

To PS AND FUNC assy CN420

A


AKP1087
CN901
AWK
S918
S919
D908
D909
NJM4558DXP
IC951
IC952
AMR7037
PDG133
V901
ASS1015
ADX7059
ASX1015
ACS1106
BASS
ACS1106
TREBLE
ACS1016
BALANCE
AAV7013-A
ANP7058-B
CN951
J8
AKT1008
*1
IC902
Q909
Q953 Q907 Q909 IC951
Q951 Q952
VR951
VR952
VR953
IC952
Q954

B

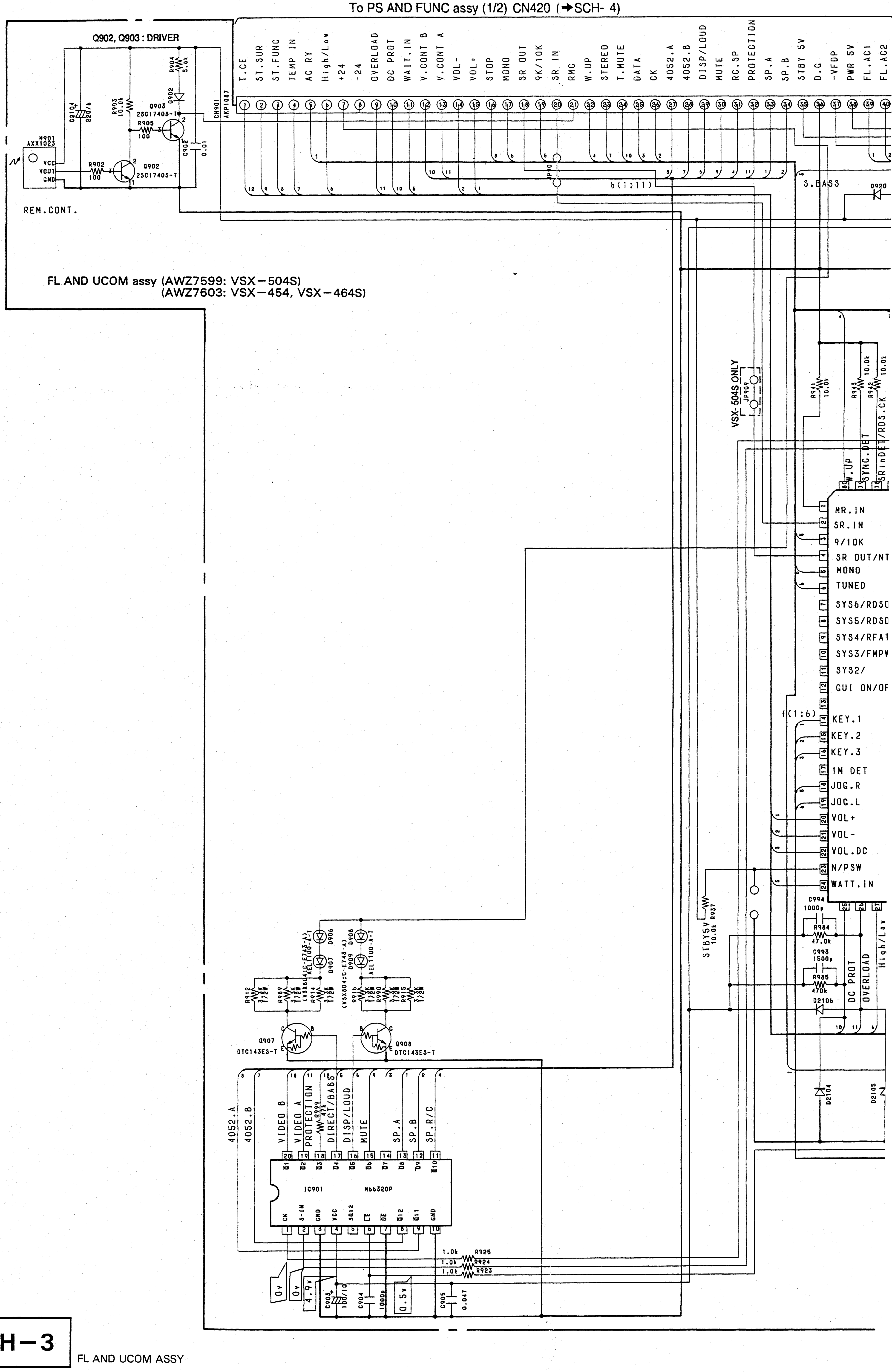
C

D

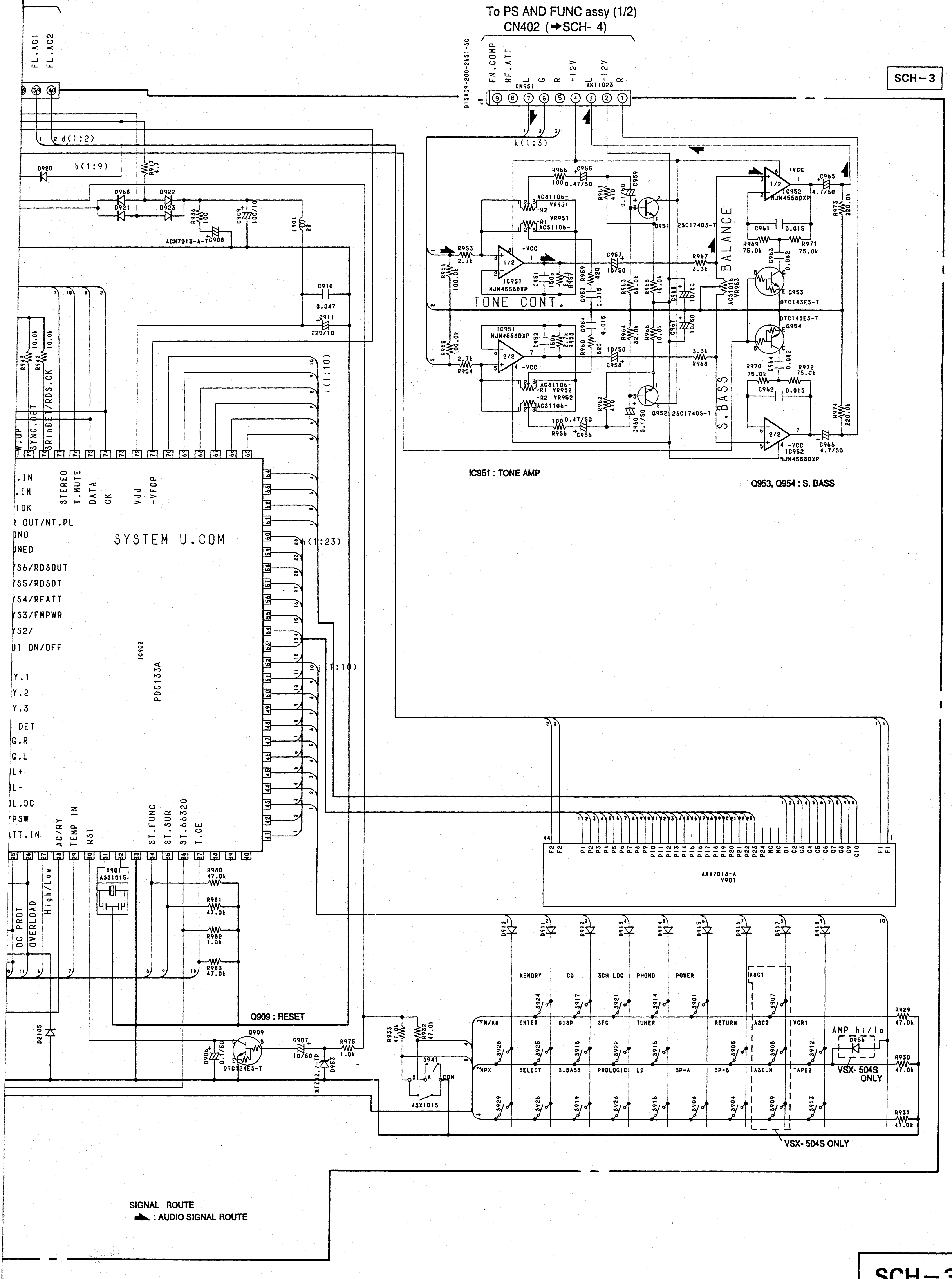
To PS AND FUNC assy CN402

- This diagram is viewed from the mounted parts side.

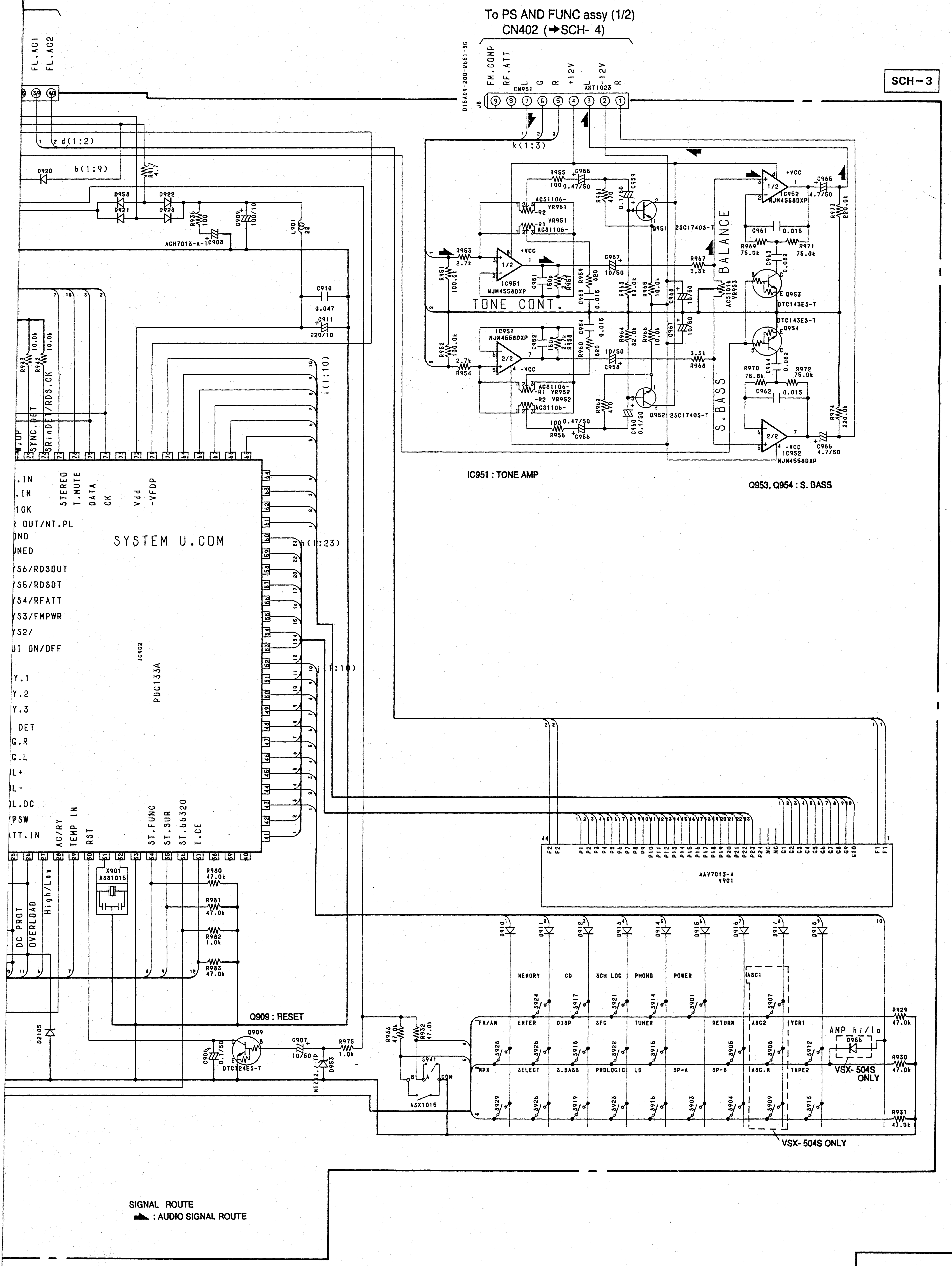
4.3 FL AND UCOM ASSY



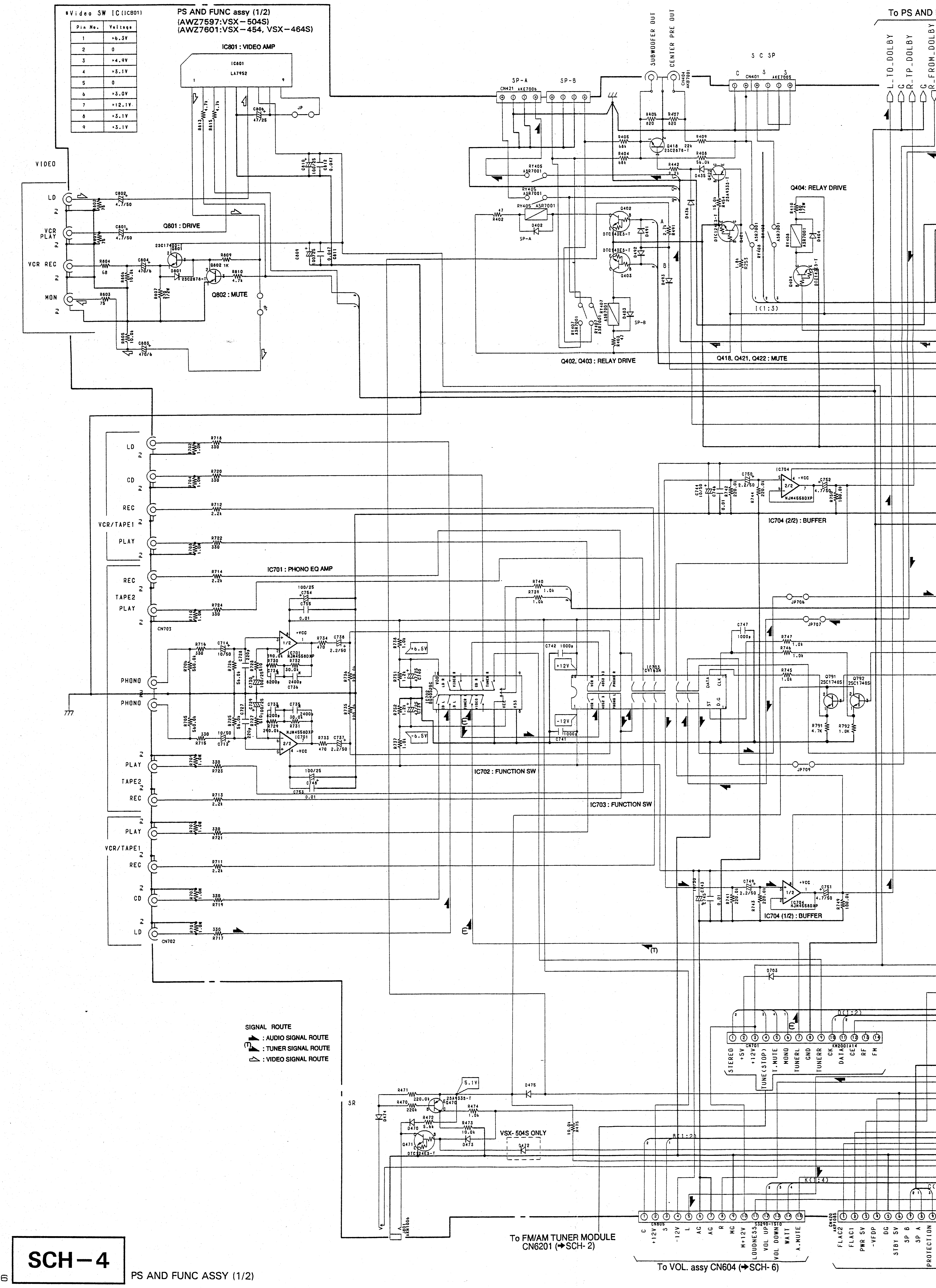
To PS AND FUNC assy (1/2) CN420 (➔SCH- 4)
Q902, Q903 : DRIVER
M901
AXX1023
VCC
VOUT
GND
REM.CONT.
C2104
220/6
R903
10.0k
R904
5.6k
D902
Q903
2SC1740S-T
R905
100
R902
100
Q902
2SC1740S-T
C902
0.01
CN901
AKP1067
T.CE
ST.SUR
ST.FUNC
TEMP IN
AC RY
High/Low
+24
-24
OVERLOAD
DC PROT
WAIT.IN
V.CONT B
V.CONT A
VOL-
VOL+
STOP
MONO
SR OUT
9K/10K
SR IN
RMC
W.UP
STEREO
T.MUTE
DATA
CK
4052.A
4052.B
DISP/LOUD
MUTE
RC.SP
PROTECTION
SP.A
SP.B
STBY 5V
D.G
-VFDP
PWR 5V
FL.AC1
FL.AC2
JP901
b(1:11)
S.BASS
D920
FL AND UCOM assy (AWZ7599: VSX-504S)
(AWZ7603: VSX-454, VSX-464S)
VSX-504S ONLY
JP909
R941
10.0k
R943
10.0k
R942
10.0k
W.UP
SYNC.DET
SRinDET/RDS.CK
MR.IN
SR.IN
9/10K
SR OUT/NT
MONO
TUNED
SYS6/RDSD
SYS5/RDSD
SYS4/RFAT
SYS3/FMPW
SYS2/
GUI ON/OF
f(1:6)
KEY.1
KEY.2
KEY.3
1M DET
JOG.R
JOG.L
VOL+
VOL-
VOL.DC
N/PSW
WATT.IN
STBY5V
R937
10.0k
C994
1000p
R984
47.0k
C993
1500p
R985
470k
D2106
DC PROT
OVERLOAD
High/Low
D2104
D2105
D906
D907
D908
D909
AEL1100-A-T
R912
R989
R914
R916
R990
R915
3.3k 1/2W
Q907
DTC143ES-T
Q908
DTC143ES-T
4052.A
4052.B
VIDEO B
VIDEO A
PROTECTION
R999
47k
DIRECT/BASS
DISP/LOUD
MUTE
SP.A
SP.B
SP.R/C
IC901
M66320P
CK
S-IN
GND
VCC
SO12
LE
OE
O12
O11
GND
R925
R924
R923
1.0k
0V
4.9V
C903
100/10
C904
1000p
0.5V
C905
0.047
A
B
C
D
E
F
1
2
3
4


To PS AND FUNC assy (1/2)
CN402 (➔SCH- 4)
FL.AC1
FL.AC2
FM.COMP
RF.ATT
L
G
R
+12V
-12V
CN951
AKT1023
D1SA09-200-2651-SC
J6
d(1:2)
b(1:9)
k(1:3)
D920
R917 4.7
D958
D921
D922
D923
R936 100
C909 100/10
L901 22
ACH7013-A-TC908
C910 0.047
C911 220/10
R943 10.0k
R942 10.0k
i(1:10)
h(1:23)
j(1:10)
R955 100
C955 0.47/50
C959 0.1/50
R961 470
ACS1106-R2 VR951
ACS1106-R1 VR951
Q951
2SC1740S-T
R953 2.7k
R951 100.0k
IC951 NJM4558DXP
C951 150p
R957
R959 820
C953 0.015
C957 10/50
R963 82.0k
R965 12.0k
C968
C967
R967 3.3k
TONE CONT.
BALANCE
ACS1106 VR953
R952 100.0k
R954 2.7k
C952 150p
R958
C954 0.015
R960 820
C958 10/50
R964 82.0k
R966 12.0k
R968 3.3k
ACS1106-R1 VR952
ACS1106-R2 VR952
R962 470
C960 0.1/50
Q952 2SC1740S-T
R956 100
C956 0.47/50
IC952 NJM4558DXP
C965 4.7/50
R973 220.0k
C961 0.015
R969 75.0k
R971 75.0k
C963 0.082
Q953 DTC143ES-T
Q954 DTC143ES-T
R970 75.0k
R972 75.0k
C964 0.082
C962 0.015
S.BASS
R974 220.0k
C966 4.7/50
IC951 : TONE AMP
Q953, Q954 : S. BASS
W.UP
SYNC.DET
SRinDET/RDS.CK
STEREO
T.MUTE
DATA
CK
Vdd
-VFDP
.IN
.IN
10K
R OUT/NT.PL
ONO
UNED
YS6/RDSOUT
YS5/RDSDT
YS4/RFATT
YS3/FMPWR
YS2/
UI ON/OFF
Y.1
Y.2
Y.3
DET
G.R
G.L
L+
L-
L.DC
PSW
ATT.IN
SYSTEM U.COM
IC902
PDC133A
AC/RY
TEMP IN
RST
ST.FUNC
ST.SUR
ST.66320
T.CE
DC PROT
OVERLOAD
High/Low
X901 ASS1015
R980 47.0k
R981 47.0k
R982 1.0k
R983 47.0k
Q909 : RESET
D2105
Q909
C906 0.1/50
DTC124ES-T
C907 10/50
R975 1.0k
MTZJ2.7-TP D953
R933 47.0k
R932 47.0k
S941
ASX1015
COM
AAV7013-A
V901
F2 F2 P1 P2 P3 P4 P5 P6 P7 P8 P9 P10 P11 P12 P13 P14 P15 P16 P17 P18 P19 P20 P21 P22 P23 P24 NC NC G1 G2 G3 G4 G5 G6 G7 G8 G9 G10 F1 F1
D910 D911 D912 D913 D914 D915 D916 D917 D918
MEMORY
CD
3CH LOG
PHONO
POWER
ASC1
FM/AM
ENTER
DISP
SFC
TUNER
RETURN
ASC2
VCR1
MPX
SELECT
S.BASS
PROLOGIC
LD
SP-A
SP-B
ASC.M
TAPE2
S924 S917 S921 S914 S901 S907
S928 S925 S918 S922 S915 S906 S908 S912
S929 S926 S919 S923 S916 S903 S904 S909 S913
AMP hi/lo
D956
VSX- 504S ONLY
R929 47.0k
R930 47.0k
R931 47.0k
VSX- 504S ONLY

SIGNAL ROUTE
▶ : AUDIO SIGNAL ROUTE


To PS AND FUNC assy (1/2)
CN402 (→SCH- 4)
D15A09-200-2651-SC
J6
CN951
AKT1023
FM.COMP
RF.ATT
L
G
R
+12V
-12V
FL.AC1
FL.AC2
d(1:2)
b(1:9)
k(1:3)
D920
R917 4.7
D958
D921
D922
D923
R936 100
C909 100/10
ACH7013-A-TC908
L901 22
C910 0.047
C911 220/10
R943 10.0k
R942 10.0k
SYNC.DET
SRinDET/RDS.CK
i(1:10)
h(1:23)
j(1:10)
SYSTEM U.COM
IC902
PDC133A
STEREO
T.MUTE
DATA
CK
Vdd
-VFDP
ST.FUNC
ST.SUR
ST.66320
T.CE
AC/RY
TEMP IN
RST
X901 ASS1015
R980 47.0k
R981 47.0k
R982 1.0k
R983 47.0k
DC PROT
OVERLOAD
High/Low
D2105
Q909 : RESET
Q909
C906 0.1/50
DTC124ES-T
C907 10/50
R975 1.0k
MTZJ2.7-TP
D953
R933 47.0k
R932 47.0k
S941
ASX1015
COM
R955 100
C955 0.47/50
C959 0.1/50
R961 470
Q951 2SC1740S-T
ACS1106-R2 VR951
VR951 R1 ACS1106-
R953 2.7k
R951 100.0k
IC951 NJM4558DXP
C951 150p
R957
R959 820
C953 0.015
C957 10/50
R963 82.0k
R965 10.0k
C968 10/50
R967 3.3k
TONE CONT.
BALANCE
ACS1016 VR953
C952 150p
R958
R960 820
C954 0.015
R964 82.0k
R966 10.0k
C967 10/50
C958 10/50
R968 3.3k
R952 100.0k
R954 2.7k
ACS1106-R1 VR952
-R2 VR952 ACS1106-
R962 470
C960 0.1/50
Q952 2SC1740S-T
R956 100
C956 0.47/50
IC952 NJM4558DXP
C965 4.7/50
R973 220.0k
C961 0.015
R969 75.0k
R971 75.0k
C963 0.082
Q953 DTC143ES-T
Q954 DTC143ES-T
C964 0.082
R970 75.0k
R972 75.0k
C962 0.015
S.BASS
R974 220.0k
C966 4.7/50
+VCC
-VCC
IC951 : TONE AMP
Q953, Q954 : S. BASS
AAV7013-A
V901
F1 F2 P1 P2 P3 P4 P5 P6 P7 P8 P9 P10 P11 P12 P13 P14 P15 P16 P17 P18 P19 P20 P21 P22 P23 NC NC G1 G2 G3 G4 G5 G6 G7 G8 G9 G10
D910 D911 D912 D913 D914 D915 D916 D917 D918
MEMORY
CD
3CH LOG
PHONO
POWER
ASC1
S924 S917 S921 S914 S901 S907
FM/AM
ENTER
DISP
SFC
TUNER
RETURN
ASC2
VCR1
R929 47.0k
AMP hi/lo
D956
S928 S925 S918 S922 S915 S905 S908 S912
MPX
SELECT
S.BASS
PROLOGIC
LD
SP-A
SP-B
ASC.M
TAPE2
VSX- 504S ONLY
R930 47.0k
S929 S926 S919 S923 S916 S903 S904 S909 S913
R931 47.0k
VSX- 504S ONLY
SIGNAL ROUTE
▶ : AUDIO SIGNAL ROUTE

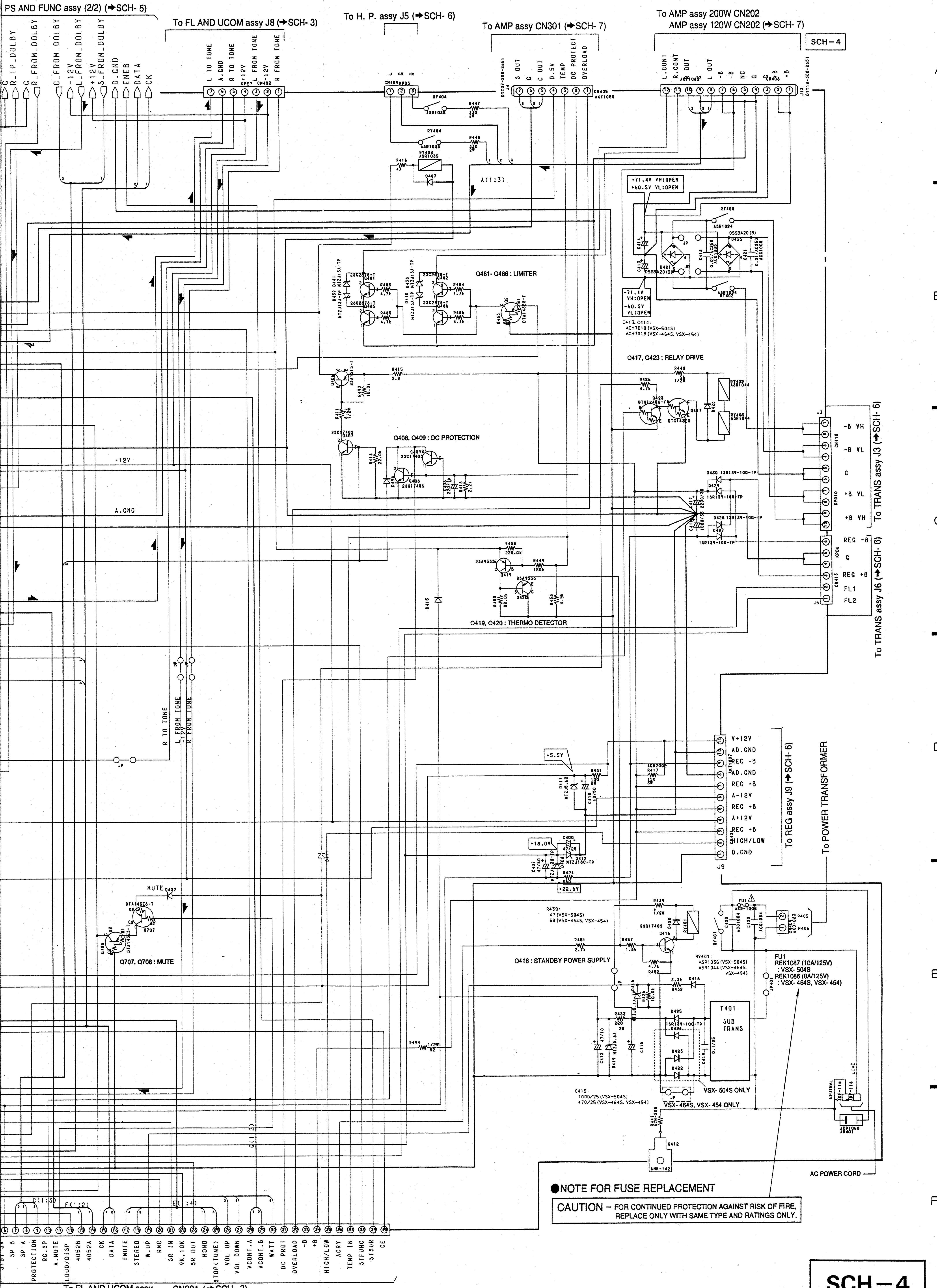
4.4 PS AND FUNC ASSY


*Video SW IC (IC801)
PS AND FUNC assy (1/2)
(AWZ7597:VSX−504S)
(AWZ7601:VSX−454, VSX−464S)
IC801 : VIDEO AMP
IC801
LA7952
VIDEO
LD
VCR PLAY
VCR REC
MON
Q801 : DRIVE
Q802 : MUTE
SP-A
SP-B
CN421 AKE7006
SUBWOOFER OUT
CENTER PRE OUT
CN404 AKB7001
S C SP
CN401
AKE7005
To PS AND
L_TO_DOLBY
R_TP_DOLBY
R_FROM_DOLBY
Q404: RELAY DRIVE
Q402, Q403 : RELAY DRIVE
Q418, Q421, Q422 : MUTE
I(1:3)
LD
CD
REC
VCR/TAPE1
PLAY
REC
TAPE2
PLAY
CN703
PHONO
PHONO
PLAY
TAPE2
REC
PLAY
VCR/TAPE1
REC
CD
LD
CN702
IC701 : PHONO EQ AMP
IC702 : FUNCTION SW
IC703 : FUNCTION SW
IC704 (2/2) : BUFFER
IC704 (1/2) : BUFFER
+6.5V
-6.5V
+12V
-12V
JP706
JP707
JP709
Q791 2SC1740S
Q792 2SC1740S
D703
D(1:2)
CN701
STEREO
+5V
+12V
TUNE(STOP)
T.MUTE
MONO
TUNERL
GND
TUNERR
CK
DATA
CE
RF
FM
KM200IA14
SR
5.1V
VSX-504S ONLY
B(1:2)
K(1:4)
CN805
S3290-1510
C
+12V
S
-12V
L
AG
AG
R
MG
M+12V
LOUDNESS
VOL UP
VOL DOWN
WATT
A.MUTE
FLAC2
FLAC1
PWR 5V
-VFDP
DG
STBY 5V
SP B
SP A
PROTECTION
To FM/AM TUNER MODULE CN6201 (➔SCH-2)
To VOL. assy CN604 (➔SCH-6)
SIGNAL ROUTE
: AUDIO SIGNAL ROUTE
: TUNER SIGNAL ROUTE
: VIDEO SIGNAL ROUTE

Pin No.	Voltage
1	+6.3V
2	0
3	+4.9V
4	+3.1V
5	0
6	+3.0V
7	+12.1V
8	+3.1V
9	+3.1V

SCH−4

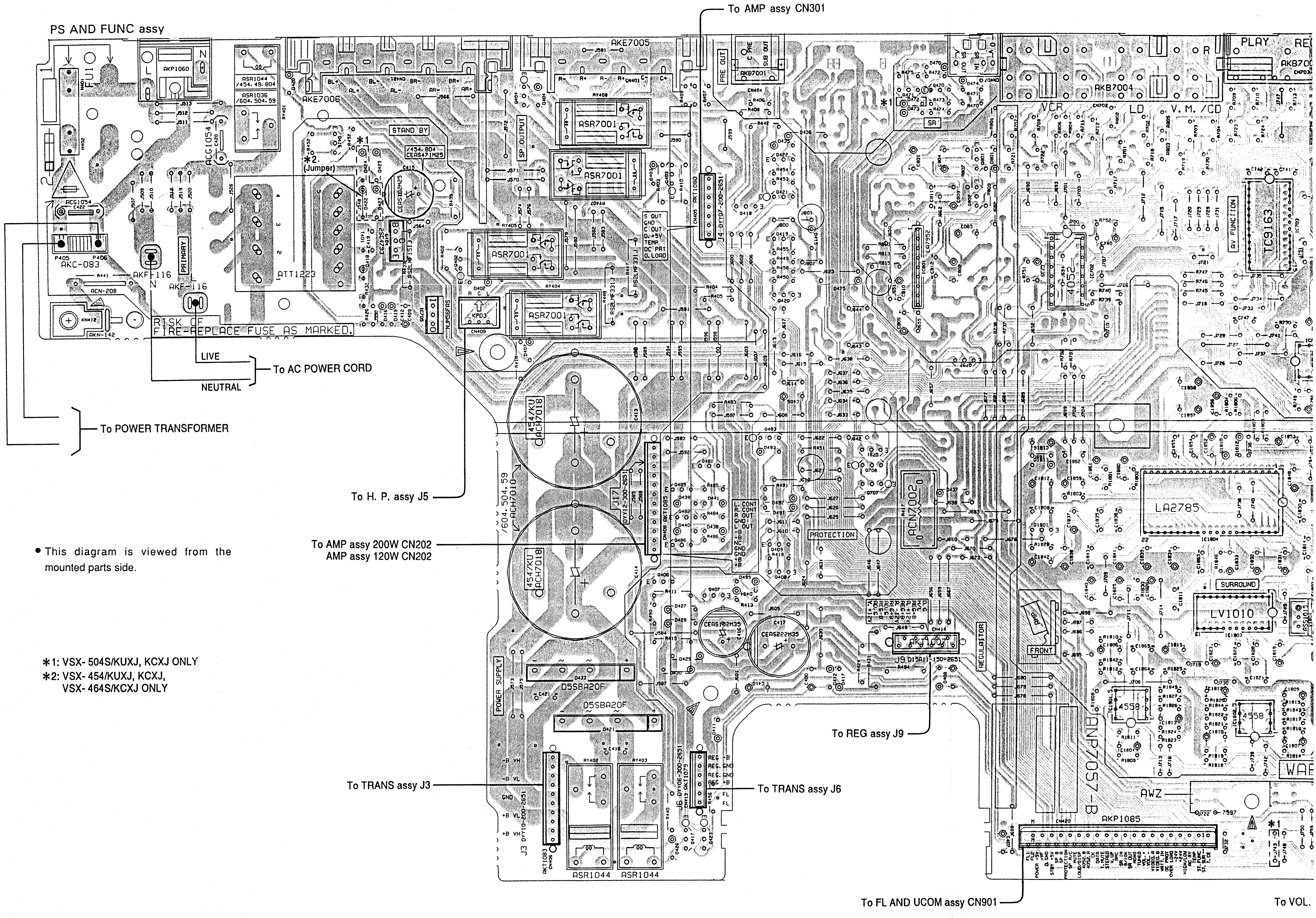
PS AND FUNC ASSY (1/2)


PS AND FUNC assy (2/2) (→SCH- 5)
To FL AND UCOM assy J8 (→SCH- 3)
To H. P. assy J5 (→SCH- 6)
To AMP assy CN301 (→SCH- 7)
To AMP assy 200W CN202
AMP assy 120W CN202 (→SCH- 7)
SCH-4
R_TP_DOLBY
R_FROM_DOLBY
C_FROM_DOLBY
-12V
L_FROM_DOLBY
+12V
S_FROM_DOLBY
D.GND
ENEB
DATA
CK
L TO TONE
A.GND
R TO TONE
+12V
L FROM TONE
-12V
R FROM TONE
CN402
KPE7
CN409
KPD3
L G R
S OUT
G
C OUT
D.5V
TEMP
DC PROTECT
OVERLOAD
CN405
AKT1080
L.CONT
R.CONT
R OUT
G
L OUT
-B
-B
NC
G
+B
+B
CN406
RY404
A5R1035
R447
R448
R416
Q407
A(1:3)
+71.4V VH:OPEN
+60.5V VL:OPEN
RY403
A5R1024
05SBA20(B)
D421
D433
-71.4V VH:OPEN
-60.5V VL:OPEN
C413, C414:
ACH7010 (VSX-504S)
ACH7018 (VSX-464S, VSX-454)
RY402
Q481- Q486 : LIMITER
2SC2878-T
R483
R484
R485
R486
Q417, Q423 : RELAY DRIVE
R415
R440
R456
Q423
DTC124ES-T
Q417
DTC143ES
RY402 A5R1044
RY405 A5R1044
Q408, Q409 : DC PROTECTION
2SC1740S
Q409
Q408
+12V
A.GND
D430 13R139-100-TP
D429
D426
D427
C417
2200/35
J3
CN410
-B VH
-B VL
G
+B VL
+B VH
KPD10
To TRANS assy J3 (→SCH- 6)
REG -B
G
REG +B
FL1
FL2
KPD6
CN413
J6
To TRANS assy J6 (→SCH- 6)
R455
220.0k
R449
150k
2SA933S
Q419
Q420
R450
R460
Q419, Q420 : THERMO DETECTOR
D415
R TO TONE
L FROM TONE
-12V
R FROM TONE
JP
+5.5V
D417
R431
R417
ACN7002
C410
V+12V
AD.GND
REG -B
AD.GND
REG +B
A-12V
REG +B
A+12V
REG +B
HIGH/LOW
D.GND
AKT1007
CN401
J9
To REG assy J9 (→SCH- 6)
To POWER TRANSFORMER
+18.0V
C400
47/25
D412
MTZJ18C-TP
C407
R424
+22.6V
D411
MUTE
Q437
DTA143ES-T
Q707
Q708
Q707, Q708 : MUTE
R439:
47 (VSX-504S)
68 (VSX-464S, VSX-454)
R439
1/2W
Q420
RY401
2SC1740S
Q416
R451
R457
R452
Q416 : STANDBY POWER SUPPLY
RY401:
A5R1036 (VSX-504S)
A5R1044 (VSX-464S, VSX-454)
FU1
AKR-1004
C420
C422
ACG1054
P405
P406
CN404
FU1
REK1087 (10A/125V)
: VSX- 504S
REK1086 (8A/125V)
: VSX- 464S, VSX- 454
JP401
D418
R432
R426
R433
D425
13R139-100-TP
D424
D423
D422
C412
C415
C414
T401
SUB TRANS
R494
1/2W
82
C415:
1000/25 (VSX-504S)
470/25 (VSX-464S, VSX-454)
VSX- 504S ONLY
VSX- 464S, VSX- 454 ONLY
R441 208
C412
ANK-142
NEUTRAL
LIVE
AKP1060
AN401
AC POWER CORD
C(1:3)
F(1:2)
E(1:4)
G(1:2)
STBY 5V
SP B
SP A
PROTECTION
RC.SP
A.MUTE
LOUD/DISP
4052B
4052A
CK
DATA
TMUTE
STEREO
W.UP
RMC
SR IN
9K.10K
SR OUT
MONO
STOP(TUNE)
VOL UP
VOL DOWN
VCONT.A
VCONT.B
WATT
DC PROT
OVERLOAD
-B
+B
HIGH/LOW
ACRY
TEMP IN
STFUNC
STSUR
CE
To FL AND UCOM assy CN901 (→SCH- 3)

●NOTE FOR FUSE REPLACEMENT

CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,
REPLACE ONLY WITH SAME TYPE AND RATINGS ONLY.

PS AND FUNC assy



1
2
3
4
5
6
A
B
C
D
AKP1060
ASR1044 /454, 49, 804
ASR1036 /604, 504, 59
AKE7005
AKE7006
ACG1054
STAND BY
*1
*2 (Jumper)
CEAS102M25
/454, 804 CEAS471M25
ASR7001
SP OUTPUT
PRE OUT
SUB OUT
AKB7001
AKB7004
AKB700
PLAY
VCR
LD
V. M. /CD
SR
AKT1080
S OUT
GND
C OUT
D. +5V
TEMP.
DC PRT
O. LOAD
P405
P406
AKC-083
AKF-116
PRIMARY
ATT1223
ACN-208
AKN-142
KPD3
RISK OF FIRE-REPLACE FUSE AS MARKED.
454/KU ACH7018
/604, 504, 59 ACH7010
DYY12-300-2651
AKT1085
J17
PROTECTION
ACN7002
4052
IC9163
AV FUNCTION
LA2785
SURROUND
LV1010
FRONT
REGULATOR
POWER SUPPLY
D5SBA20F
CEAS102M35
CEAS222M35
J9 D15A11-150-2651
AKT1079
J6 DY106-300-2651
REG. -B
REG. GND
REG. GND
REG. +B
FL
FL
+B VH
+B VL
GND
+B VL
+B VH
J3 DY110-200-2651
AKT1083
ASR1044
ASR1044
ANP7057-B
AWZ
AKP1085
4558
4558

To AMP assy CN301

LIVE

NEUTRAL

To AC POWER CORD

To POWER TRANSFORMER

To H. P. assy J5

To AMP assy 200W CN202
AMP assy 120W CN202

To REG assy J9

To TRANS assy J3

To TRANS assy J6

To FL AND UCOM assy CN901

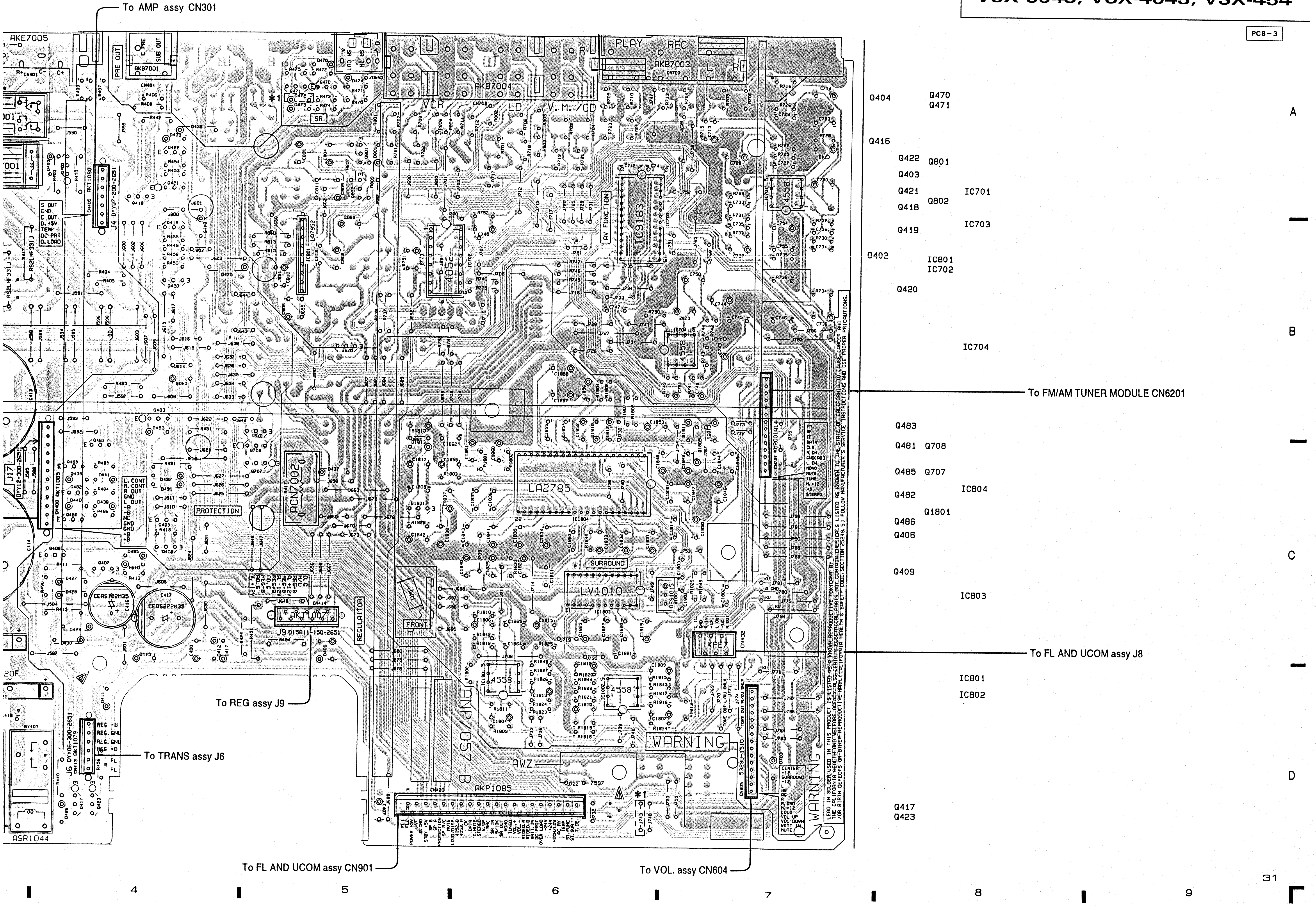
To VOL.

- This diagram is viewed from the mounted parts side.

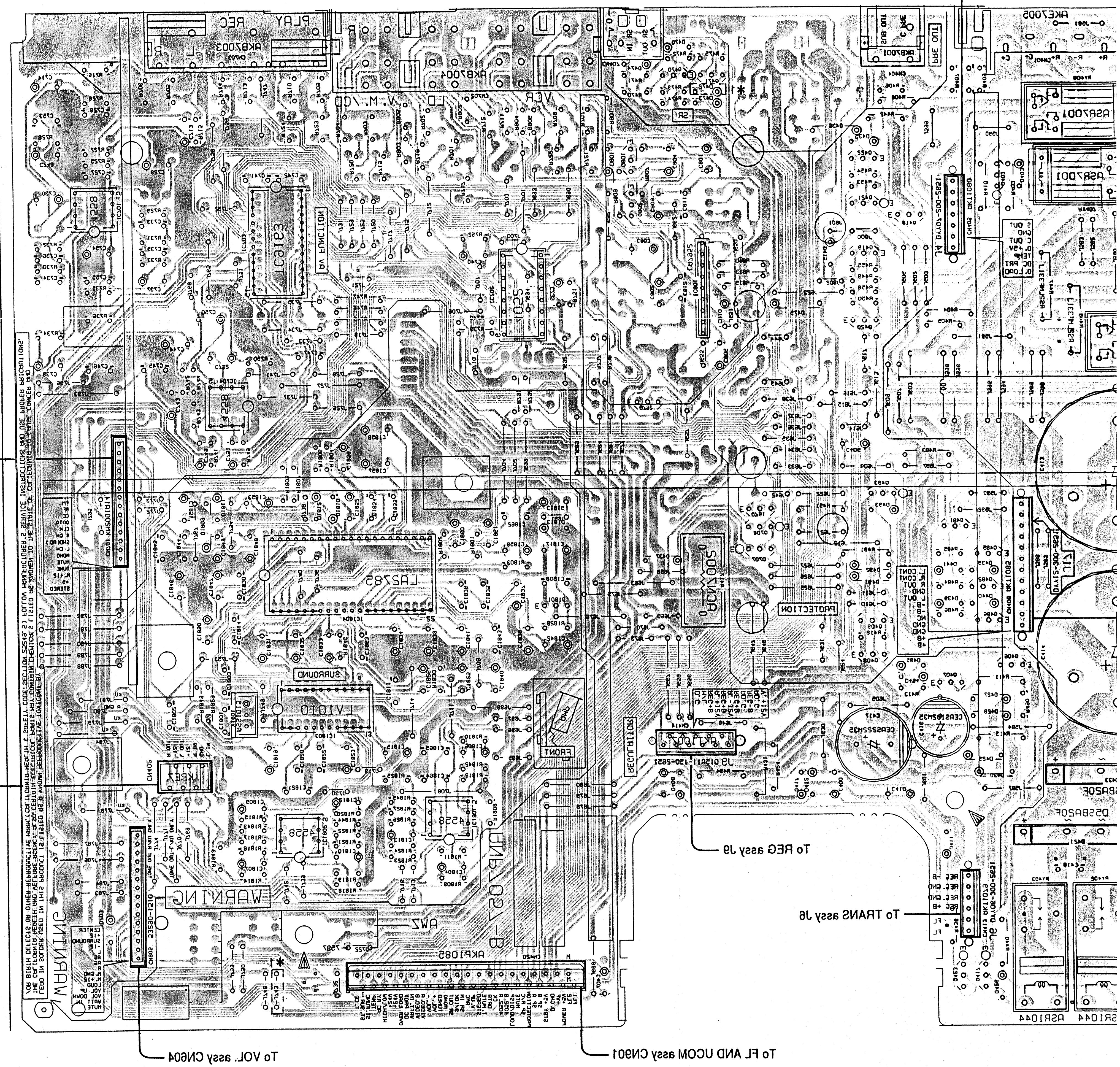
＊1: VSX- 504S/KUXJ, KCXJ ONLY

＊2: VSX- 454/KUXJ, KCXJ,
VSX- 464S/KCXJ ONLY

PCB-3


4
5
6
7
8
9
A
B
C
D
To AMP assy CN301
To FM/AM TUNER MODULE CN6201
To FL AND UCOM assy J8
To REG assy J9
To TRANS assy J6
To FL AND UCOM assy CN901
To VOL. assy CN604
AKE7005
AKB7001
PRE OUT
SUB OUT
SR
AKB7004
AKB7003
PLAY
REC
VCR
LD
V.M./CD
AV FUNCTION
IC9163
4558
LA7952
ACN7002
LA2785
PROTECTION
SURROUND
LV1010
REGULATOR
FRONT
AMP
KPE7
ANP7057-B
AWZ
AKP1085
WARNING
AKT1080
AKT1085
ASR1044
CEAS102M35
CEAS222M35
J9 D15A11-150-2651
CN701 KM200IA14
CN805 53290-1510
LEAD IN SOLDER USED IN THIS PRODUCT IS LISTED AS A KNOWN REPRODUCTIVE TOXICANT BY THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. ALSO CERTAIN PARTS MAY CONTAIN CHEMICALS LISTED AS KNOWN TO THE STATE OF CALIFORNIA HEALTH AND WELFARE AGENCY. SECTION 25249.5) FOLLOW MANUFACTURER'S SERVICE INSTRUCTIONS AND USE PROPER PRECAUTIONS.
Q404
Q470
Q471
Q416
Q422
Q801
Q403
Q421
IC701
Q418
Q802
IC703
Q419
Q402
IC801
IC702
Q420
IC704
Q483
Q481
Q708
Q485
Q707
IC804
Q482
Q1801
Q486
Q406
Q409
IC803
IC801
IC802
Q417
Q423

PCB-3


PLAY
REC
AKB7003
AKB7004
VCR
VA FUNCTION
LA2785
LV1010
SURROUND
PROTECTION
FRONT
REGULATOR
WARNING
AWZ
ANP-057-B
AKP1085
4558
ASR7001
AKE7005
AKP7001
DSSBA20F
ASR1044

To AMP assy CN301

To FM/AM TUNER MODULE CN6201

To FL AND UCOM assy J8

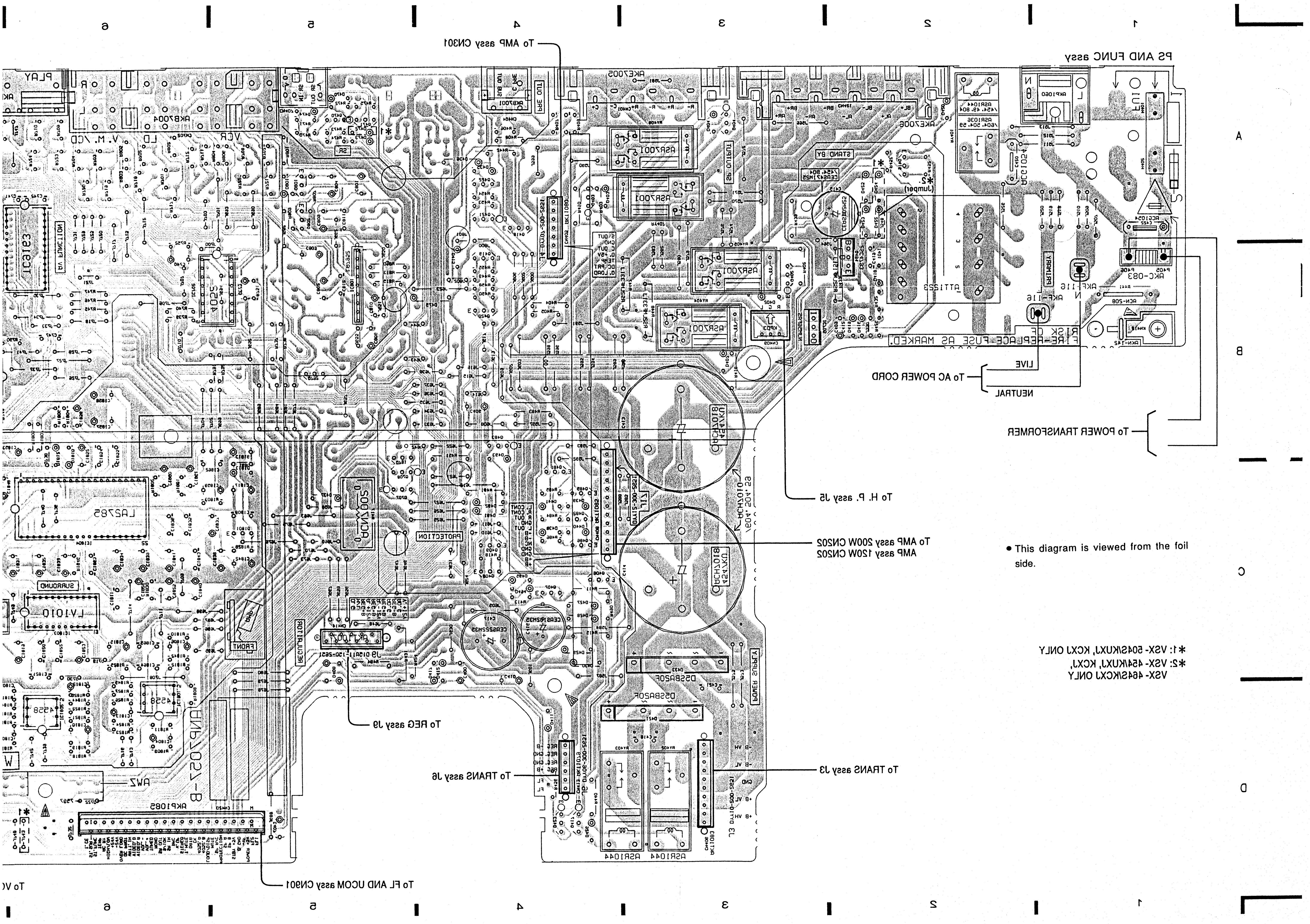
To REG assy J9

To TRANS assy J6

To VOL. assy CN604

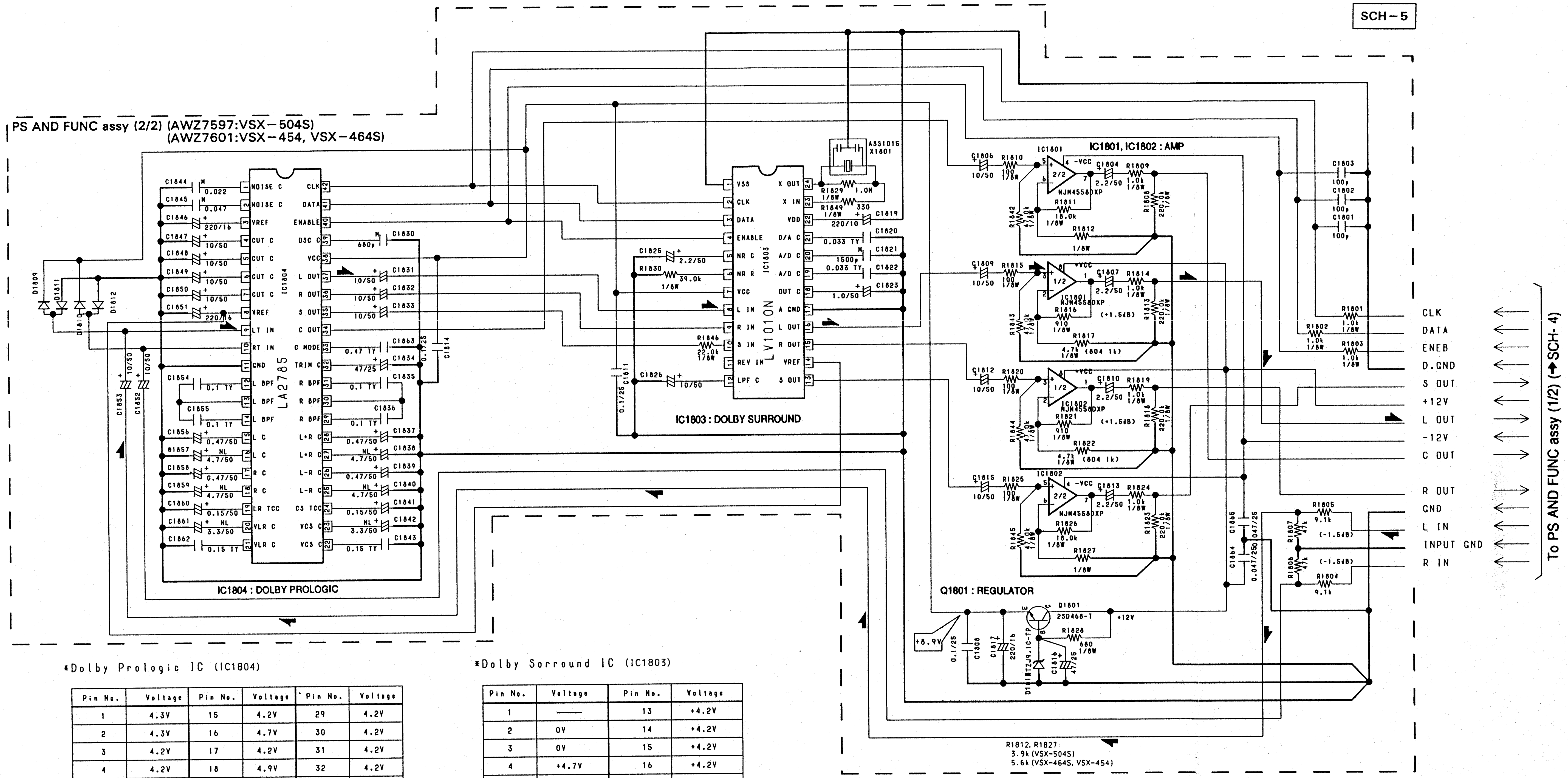
To FL AND UCOM assy CN901

Q404
Q470
Q471
Q416
Q422 Q801
Q403
Q421 IC701
Q802
Q418
Q419 IC703
Q402
IC801
IC702
Q420
IC704
Q483
Q481 Q708
Q485 Q707
IC804
Q482
Q1801
Q486
Q406
Q409
IC803
IC801
IC802
Q417
Q423


6
5
4
3
2
1
A
B
C
D
PS AND FUNC assy
To AMP assy CN301
To AC POWER CORD
LIVE
NEUTRAL
To POWER TRANSFORMER
To H. P. assy J5
To AMP assy 200W CN202
AMP assy 120W CN202
To REG assy J9
To TRANS assy J6
To TRANS assy J3
To FL AND UCOM assy CN901
To V

- This diagram is viewed from the foil side.

✻1: VSX-504S/KUXJ, KCXJ ONLY
✻2: VSX-454/KUXJ, KCXJ,
VSX-464S/KCXJ ONLY


PS AND FUNC assy (2/2) (AWZ7597:VSX-504S)
(AWZ7601:VSX-454, VSX-464S)
IC1804 : DOLBY PROLOGIC
LA2785
IC1803 : DOLBY SURROUND
LV1010N
IC1801, IC1802 : AMP
NJM4558DXP
Q1801 : REGULATOR
2SD468-T
A331015 X1801
+8.9V
+12V
CLK
DATA
ENEB
D.GND
S OUT
+12V
L OUT
-12V
C OUT
R OUT
GND
L IN
INPUT GND
R IN
To PS AND FUNC assy (1/2) (➔SCH-4)
R1812, R1827:
3.9k (VSX-504S)
5.6k (VSX-464S, VSX-454)
SIGNAL ROUTE
: AUDIO SIGNAL ROUTE

*Dolby Prologic IC (IC1804)

Pin No.	Voltage	Pin No.	Voltage	Pin No.	Voltage
1	4.3V	15	4.2V	29	4.2V
2	4.3V	16	4.7V	30	4.2V
3	4.2V	17	4.2V	31	4.2V
4	4.2V	18	4.9V	32	4.2V
5	4.2V	19	4.2V	33	4.2V
6	4.2V	20	4.2V	34	4.2V
7	4.2V	21	4.2V	35	4.2V
8	4.2V	22	4.2V	36	4.2V
9	4.2V	23	4.2V	37	4.2V
10	4.2V	24	4.2V	38	8.4V
11	0V	25	4.9V	39	——
12	4.2V	26	4.2V	40	4.7V
13	4.2V	27	4.7V	41	0V
14	4.2V	28	4.2V	42	0V

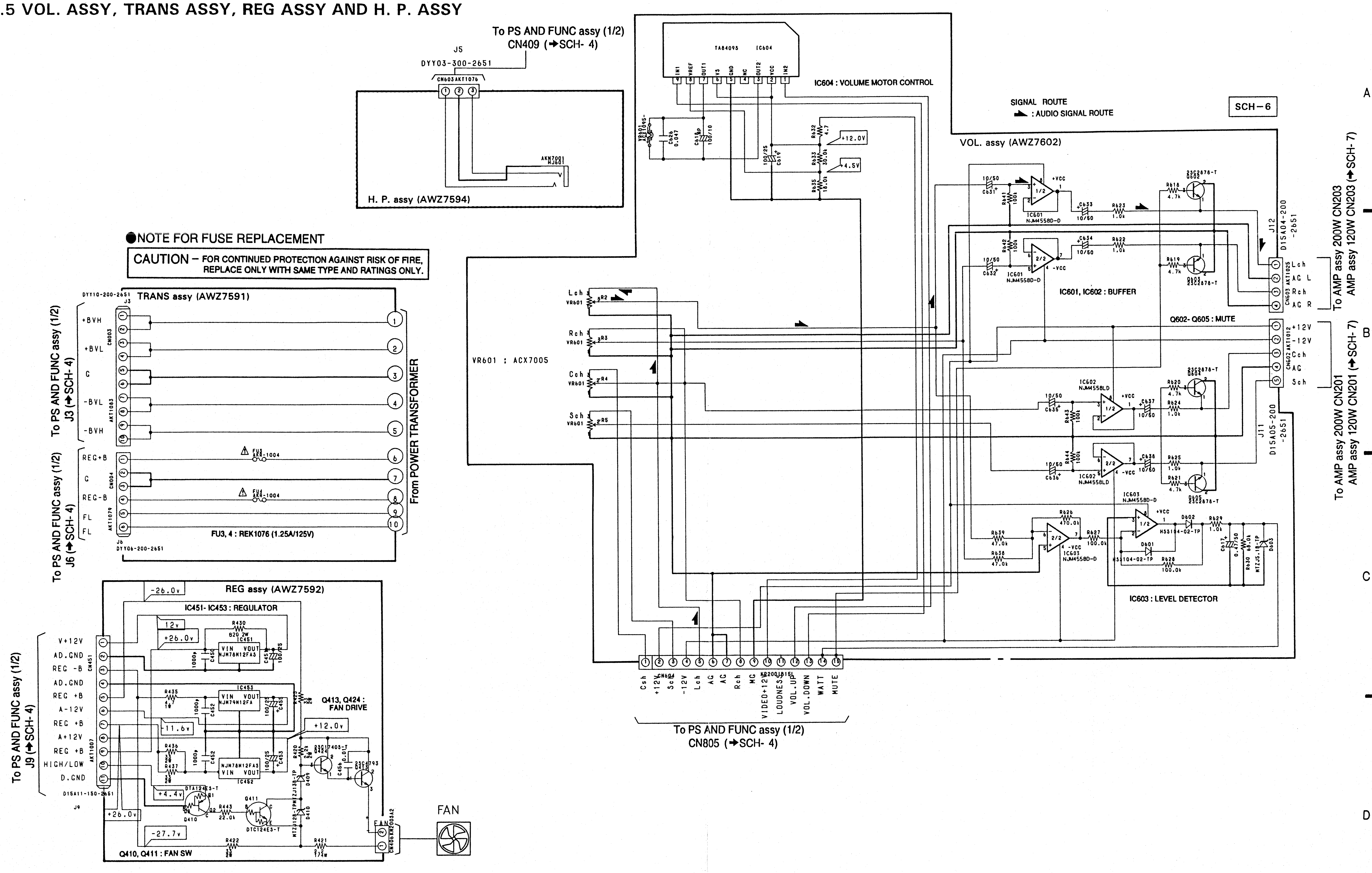
*Dolby Sorround IC (IC1803)

Pin No.	Voltage	Pin No.	Voltage
1	——	13	+4.2V
2	0V	14	+4.2V
3	0V	15	+4.2V
4	+4.7V	16	+4.2V
5	+2.4V	17	——
6	+0.7V	18	+4.2V
7	+8.4V	19	+4.2V
8	+4.2V	20	+4.2V
9	+4.2V	21	+4.2V
10	+4.2V	22	+4.8V
11	+4.2V	23	——
12	+4.2V	24	——

4.5 VOL. ASSY, TRANS ASSY, REG ASSY AND H. P. ASSY

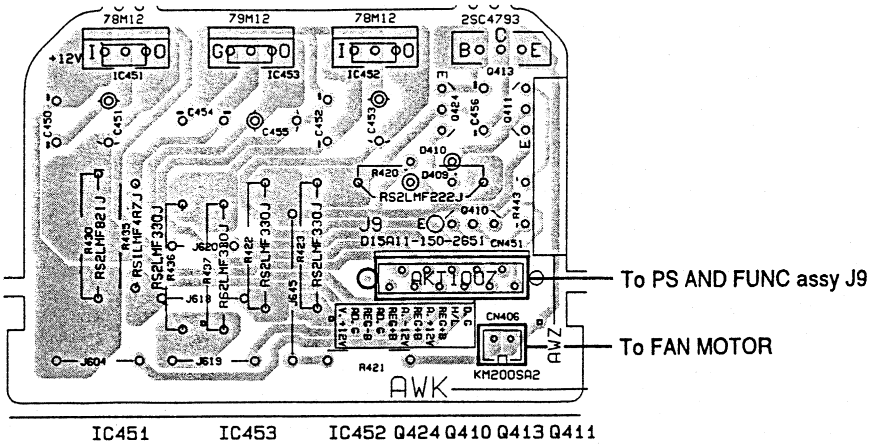
●NOTE FOR FUSE REPLACEMENT

CAUTION – FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE AND RATINGS ONLY.

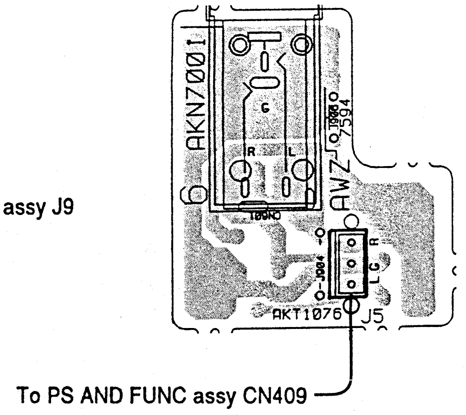

A
B
C
D
To PS AND FUNC assy (1/2) CN409 (➔SCH- 4)
J5
DYY03-300-2651
CN603 AKT1076
AKN7001 HJ601
H. P. assy (AWZ7594)
TA8409S
IC604
IC604 : VOLUME MOTOR CONTROL
SIGNAL ROUTE
: AUDIO SIGNAL ROUTE
SCH-6
VOL. assy (AWZ7602)
+12.0V
+4.5V
IC601 NJM4558D-D
IC601, IC602 : BUFFER
Q602- Q605 : MUTE
IC603 : LEVEL DETECTOR
IC602 NJM4558LD
IC603 NJM4558D-D
J12 D15A04-200-2651
J11 D15A05-200-2651
Lch
AG L
Rch
AG R
+12V
-12V
Cch
AG
Sch
To AMP assy 200W CN203 AMP assy 120W CN203 (➔SCH- 7)
To AMP assy 200W CN201 AMP assy 120W CN201 (➔SCH- 7)
VR601 : ACX7005
Lch VR601
Rch VR601
Cch VR601
Sch VR601
Csh
+12V
Sc
-12V
Lch
AG
AG
Rch
MG
VIDEO+12V
LOUDNESS
VOL.UP
VOL.DOWN
WATT
MUTE
CN604
KE200
To PS AND FUNC assy (1/2) CN805 (➔SCH- 4)
DYY10-200-2651 J3
TRANS assy (AWZ7591)
CN003
AKT1083
+BVH
+BVL
C
-BVL
-BVH
To PS AND FUNC assy (1/2) J3 (➔SCH- 4)
REG+B
C
REG-B
FL
FL
CN004
AKT1079
J6 DYY06-200-2651
To PS AND FUNC assy (1/2) J6 (➔SCH- 4)
FU3 AEK-1004
FU4 AEK-1004
FU3, 4 : REK1076 (1.25A/125V)
From POWER TRANSFORMER
REG assy (AWZ7592)
-26.0v
IC451- IC453 : REGULATOR
12v
+26.0v
R430
IC451
NJM78M12FA5
IC453
NJM79M12FA
IC452
NJM78M12FA5
Q413, Q424 : FAN DRIVE
+12.0v
-11.6v
+4.4v
+26.0v
-27.7v
DTA124E3-T
DTC124E3-T
Q410
Q411
Q410, Q411 : FAN SW
FAN
V+12V
AD.GND
REG -B
AD.GND
REG +B
A-12V
REG +B
A+12V
REG +B
HIGH/LOW
D.GND
CN451
AKT1007
D15A11-150-2651
J9
To PS AND FUNC assy (1/2) J9 (➔SCH- 4)

- This diagram is viewed from the mounted parts side.

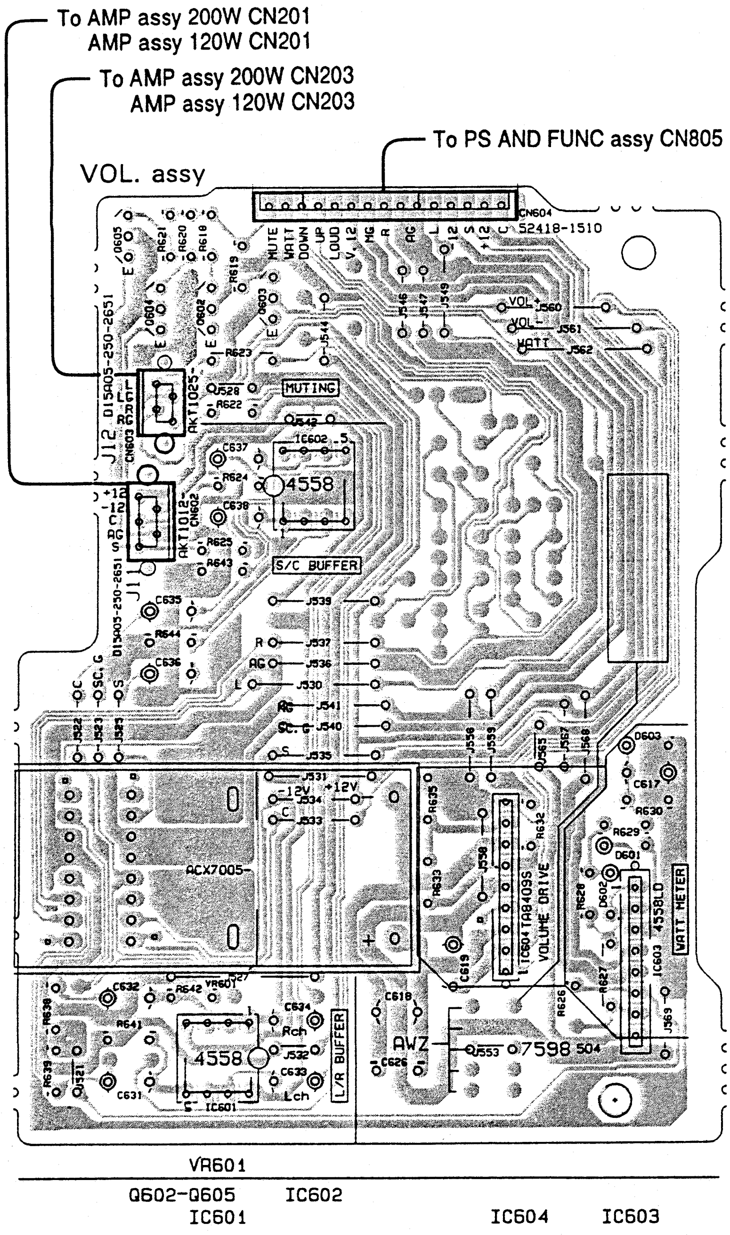
REG assy


78M12
79M12
78M12
2SC4793
IC451
IC453
IC452
Q413
Q424
Q410
Q411
D410
D409
R420
RS2LMF222J
R430
RS2LMF821J
RS1LMF4R7J
R62LMF330J
RS2LMF330J
J9
D15A11-150-2651
CN451
AKT1007
CN406
KM200SA2
AWZ
AWK
To PS AND FUNC assy J9
To FAN MOTOR
IC451 IC453 IC452 Q424 Q410 Q413 Q411

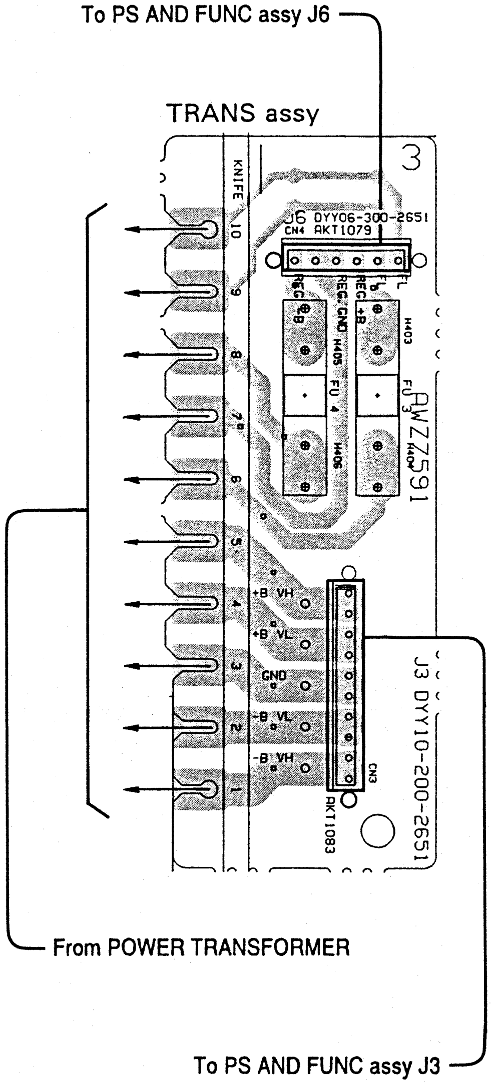
H. P. assy


AKN7001
AWZ7594
J5
AKT1076
To PS AND FUNC assy CN409

VOL. assy


To AMP assy 200W CN201
AMP assy 120W CN201
To AMP assy 200W CN203
AMP assy 120W CN203
To PS AND FUNC assy CN805
CN604
52418-1510
MUTE
WATT
DOWN
UP
LOUD
MUTING
J12
D15A05-250-2651
AKT1025
CN603
J11
AKT1012
CN602
IC602
4558
S/C BUFFER
ACX7005
IC604 TA8409S
VOLUME DRIVE
IC603 4558LD
WATT METER
4558
IC601
Rch
Lch
L/R BUFFER
AWZ
7598
VR601
Q602–Q605 IC602
IC601 IC604 IC603

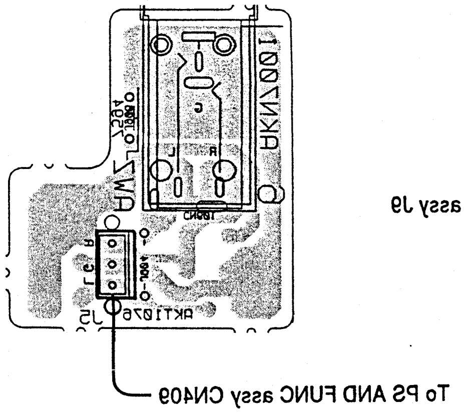
TRANS assy


To PS AND FUNC assy J6
J6 DYY06-300-2651
CN4 AKT1079
KNIFE
AWZ7591
J3 DYY10-200-2651
AKT1083
CN3
+B VH
+B VL
GND
-B VL
-B VH
From POWER TRANSFORMER
To PS AND FUNC assy J3

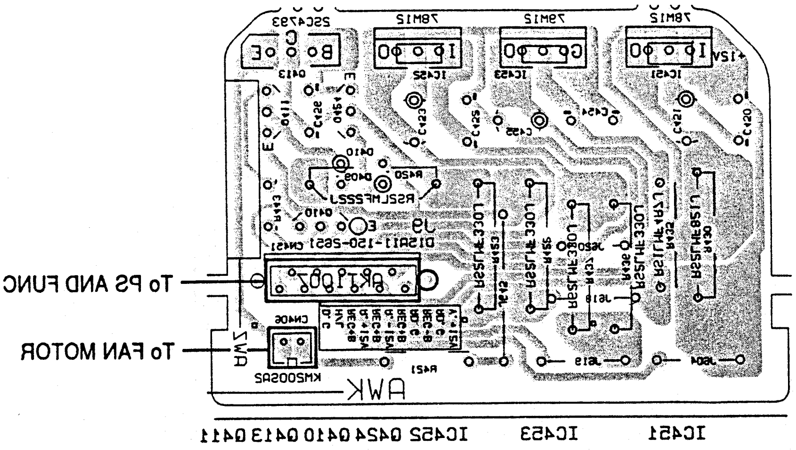
PCB-4

- This diagram is viewed from the foil side.

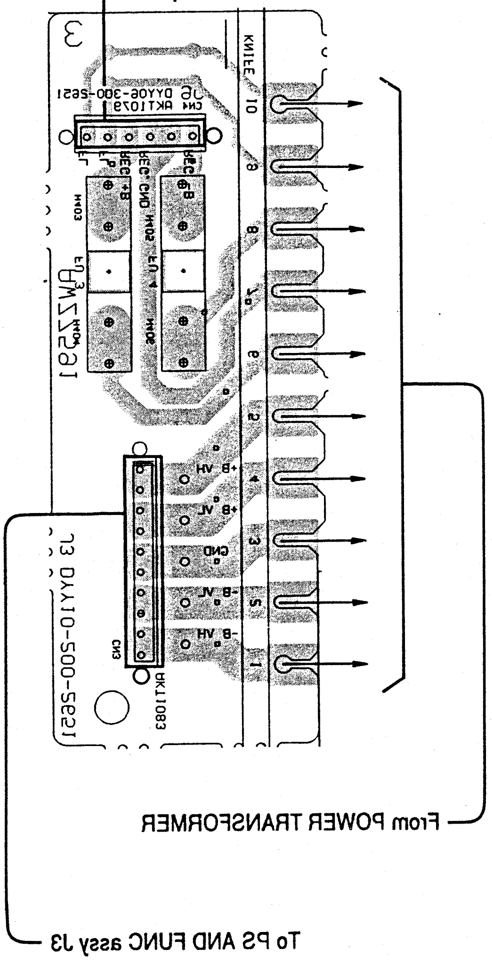
H. P. assy


AKN7001
J5
AKT1076
To PS AND FUNC assy CN409

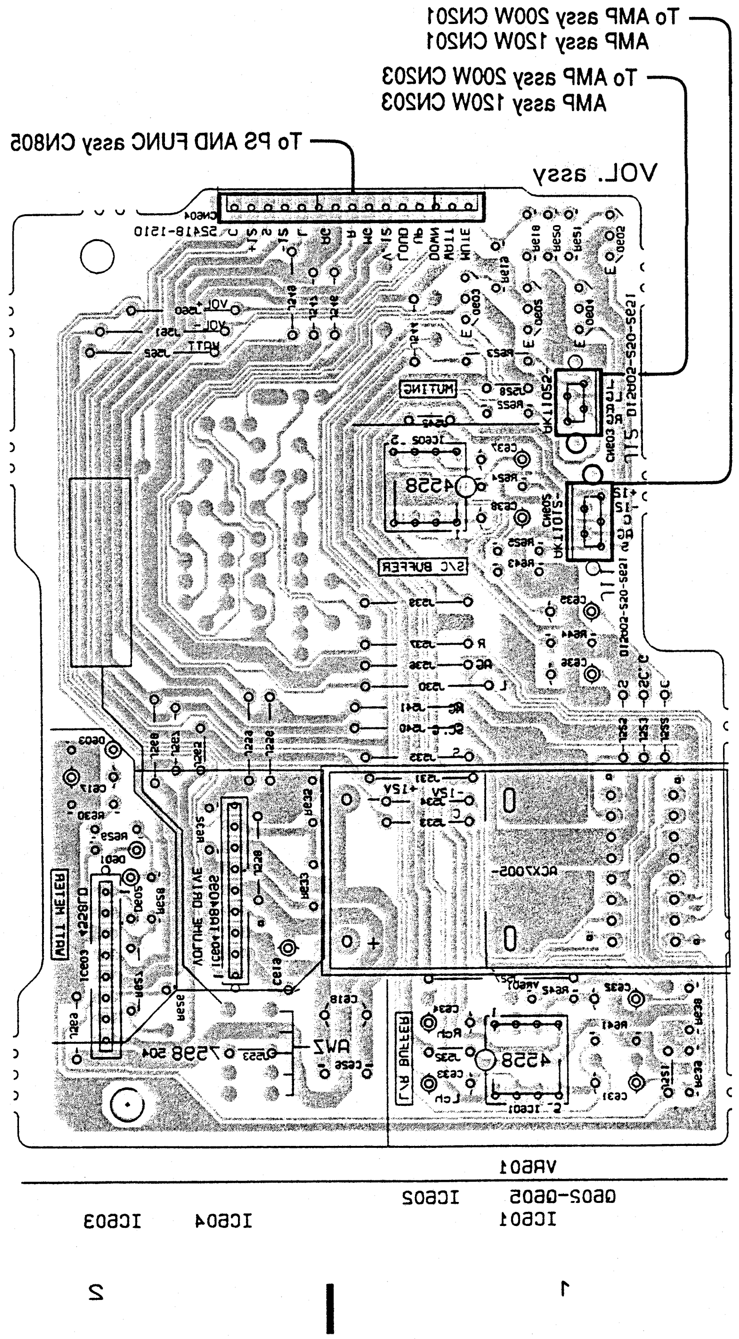
REG assy


2SC4793
78M12
79M12
78M12
+12V
D1SA11-150-2651
CN451
J9
To PS AND FUNC assy J9
CN406
KM200SA2
To FAN MOTOR
AWK
AWZ
IC451
IC453
IC452 Q424 Q410 Q413 Q411

TRANS assy

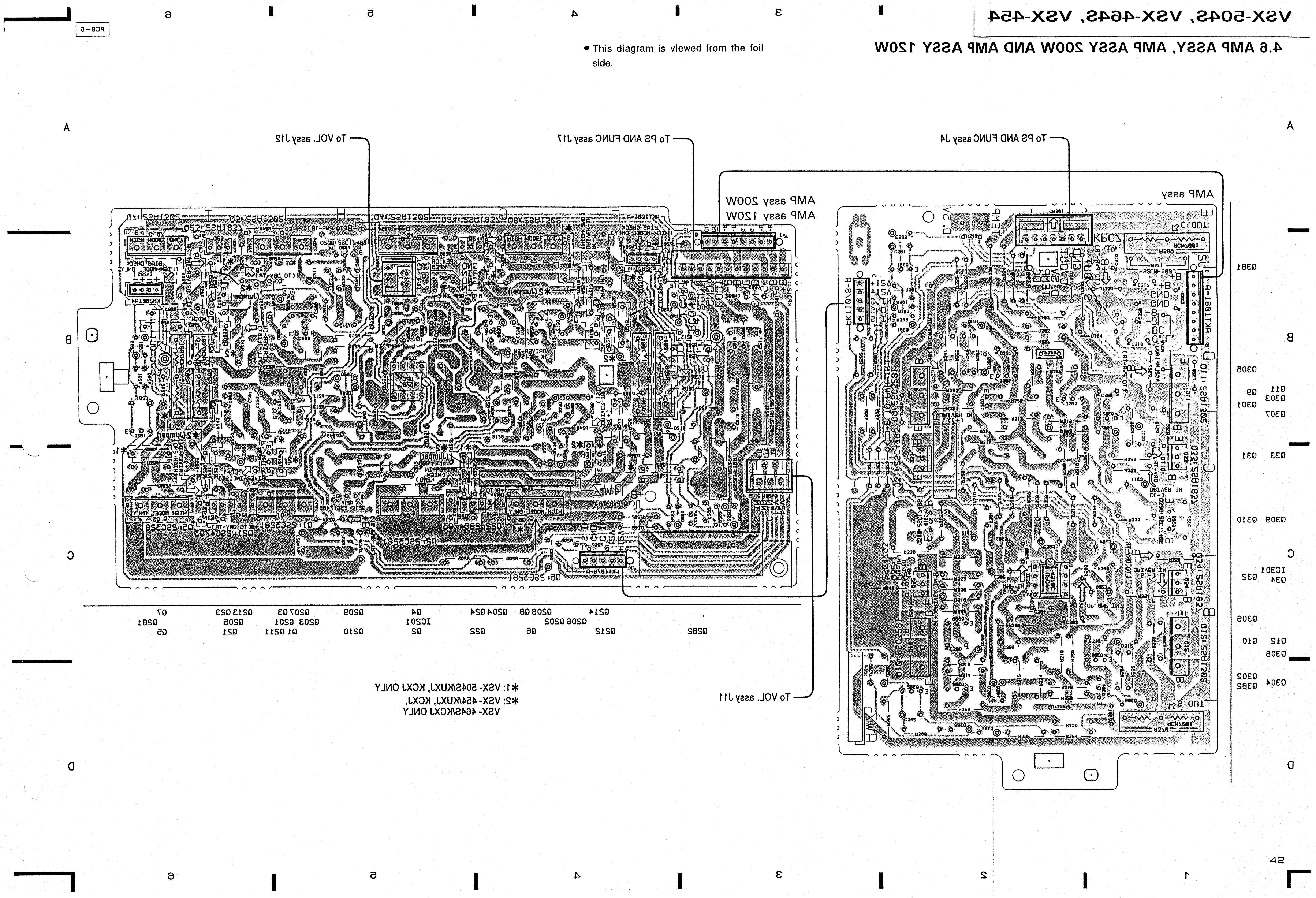

To PS AND FUNC assy J6
J6 DY106-300-2651
CN4 AKT1079
AWZ591
+B VH
+B VL
GND
-B VL
-B VH
J3 DY110-200-2651
CN3
AKT1083
KM1EE
From POWER TRANSFORMER
To PS AND FUNC assy J3

VOL. assy


To AMP assy 200W CN201
AMP assy 120W CN201
To AMP assy 200W CN203
AMP assy 120W CN203
To PS AND FUNC assy CN805
CN604
52418-1510
MUTING
4558
S/C BUFFER
ACX7005-
L/R BUFFER
4558
DATA BUFFER
VOLUME DRIVE
7598 S04
AWZ
VR601
Q602–Q605
IC602
IC601
IC604
IC603

4.6 AMP ASSY, AMP ASSY 200W AND AMP ASSY 120W

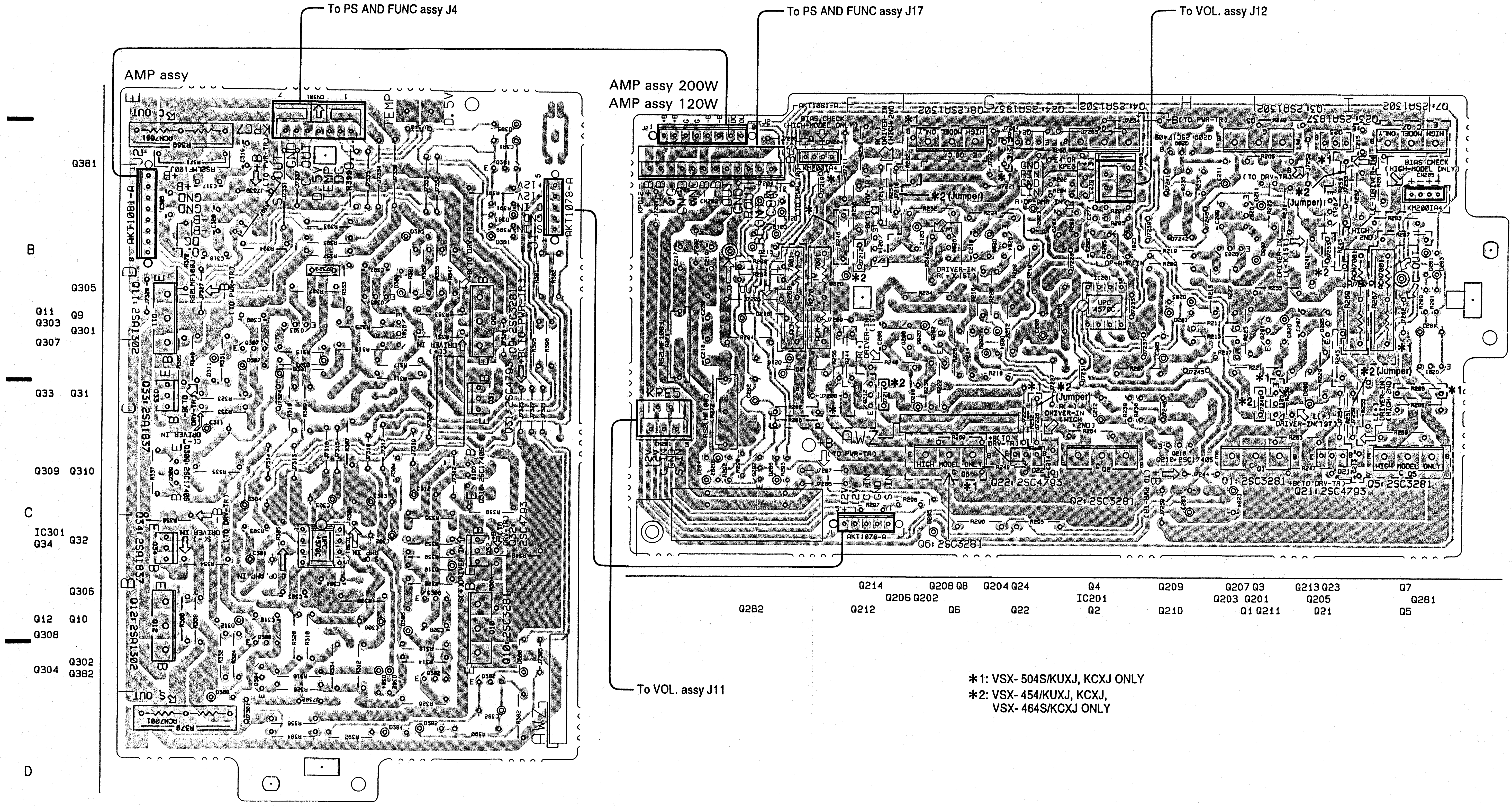
- This diagram is viewed from the foil side.


PCB-5
A
B
C
D
6
5
4
3
2
1
To VOL. assy J12
To PS AND FUNC assy J17
To PS AND FUNC assy J4
AMP assy 200W
AMP assy 120W
AMP assy
To VOL. assy J11
Q7 Q213 Q23 Q207 Q3 Q209 Q4 Q208 Q8 Q204 Q24 Q214
Q281 Q205 Q203 Q201 IC201 Q206 Q202
Q5 Q21 Q1 Q211 Q210 Q2 Q22 Q6 Q212 Q282
Q381
Q305
Q11 Q9
Q303
Q301
Q307
Q33 Q31
Q309 Q310
IC301
Q32 Q34
Q306
Q12 Q10
Q308
Q302
Q382 Q304

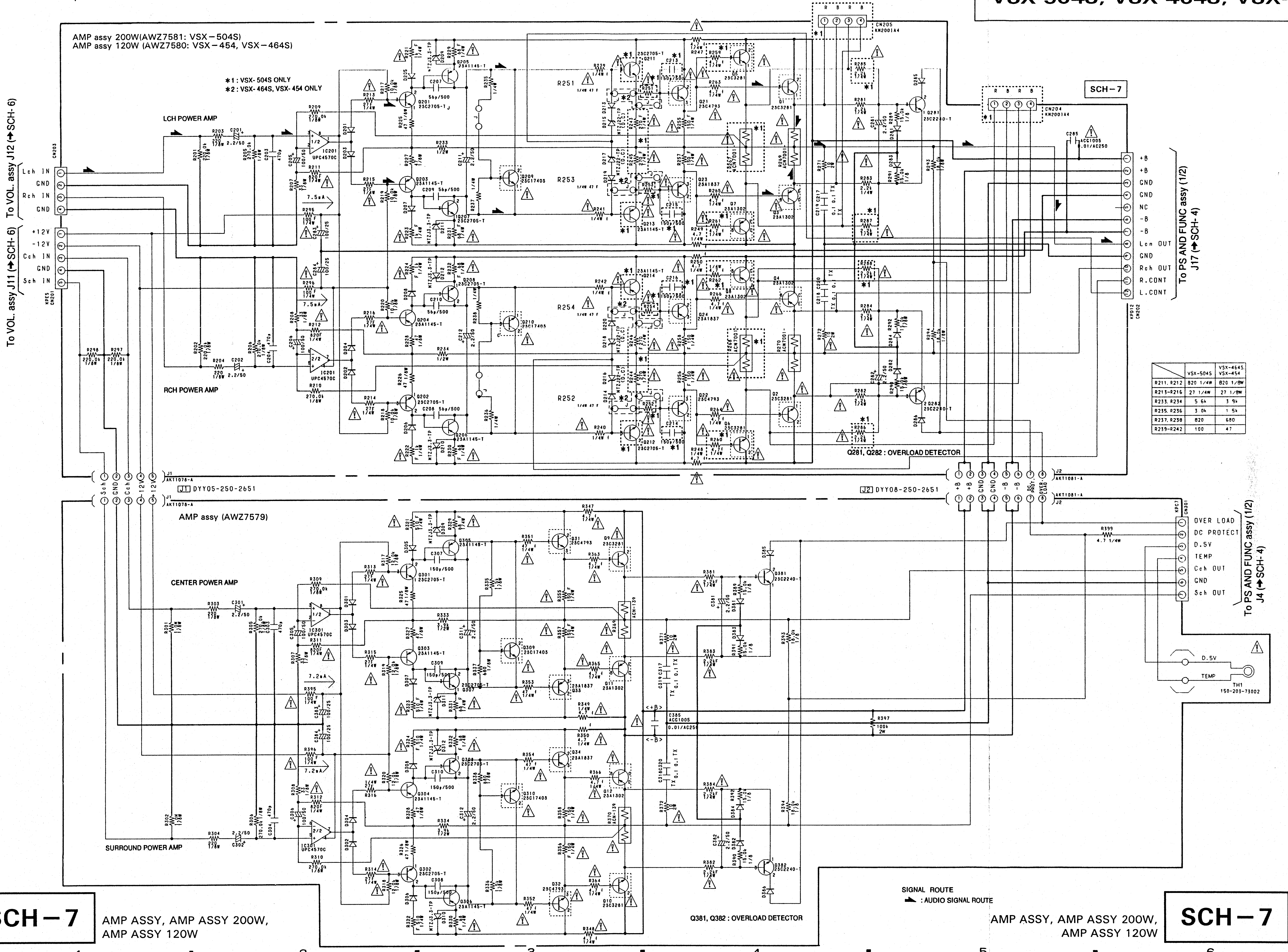
*1: VSX-504S/KUXJ, KCXJ ONLY
*2: VSX-454/KUXJ, KCXJ, VSX-464S/KCXJ ONLY

4.6 AMP ASSY, AMP ASSY 200W AND AMP ASSY 120W

- This diagram is viewed from the mounted parts side.


To PS AND FUNC assy J4
To PS AND FUNC assy J17
To VOL. assy J12
To VOL. assy J11
AMP assy
AMP assy 200W
AMP assy 120W
AKT1081-A
AKT1078-A
KPE5
UPC4570C
Q381
Q305
Q11 Q9
Q303 Q301
Q307
Q33 Q31
Q309 Q310
IC301
Q34 Q32
Q306
Q12 Q10
Q308
Q304 Q302
Q382
Q214 Q208 Q8 Q204 Q24 Q4 Q209 Q207 Q3 Q213 Q23 Q7
Q206 Q202 IC201 Q203 Q201 Q205 Q281
Q282 Q212 Q6 Q22 Q2 Q210 Q1 Q211 Q21 Q5

*1: VSX- 504S/KUXJ, KCXJ ONLY
*2: VSX- 454/KUXJ, KCXJ,
VSX- 464S/KCXJ ONLY


AMP assy 200W(AWZ7581: VSX-504S)
AMP assy 120W (AWZ7580: VSX-454, VSX-464S)
*1 : VSX-504S ONLY
*2 : VSX-464S, VSX-454 ONLY
LCH POWER AMP
RCH POWER AMP
AMP assy (AWZ7579)
CENTER POWER AMP
SURROUND POWER AMP
To VOL. assy J12 (➜SCH-6)
To VOL. assy J11 (➜SCH-6)
To PS AND FUNC assy (1/2) J17 (➜SCH-4)
To PS AND FUNC assy (1/2) J4 (➜SCH-4)
Lch IN
GND
Rch IN
GND
+12V
-12V
Cch IN
GND
Sch IN
CN203
CN201
+B
+B
GND
GND
NC
-B
-B
Lch OUT
GND
Rch OUT
R.CONT
L.CONT
OVER LOAD
DC PROTECT
D.5V
TEMP
Cch OUT
GND
Sch OUT
CN205 KM200TA4
CN204 KM200TA4
SCH-7
J1 AKT1078-A
J1 DYY05-250-2651
J2 AKT1081-A
J2 DYY08-250-2651
Q281, Q282 : OVERLOAD DETECTOR
Q381, Q382 : OVERLOAD DETECTOR
TH1 150-203-73002
IC201 UPC4570C
IC301 UPC4570C
7.5mA
7.2mA
SIGNAL ROUTE
: AUDIO SIGNAL ROUTE

	VSX-504S	VSX-464S, VSX-454
R211, R212	820 1/4W	820 1/8W
R213–R216	27 1/4W	27 1/8W
R233, R234	5.6k	3.9k
R235, R236	3.0k	1.5k
R237, R238	820	680
R239–R242	100	47

SCH−7

AMP ASSY, AMP ASSY 200W,
AMP ASSY 120W

5. PCB PARTS LIST

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω → 56 × 10^1 → 561 ························ RD1/8PM $\boxed{5}$ $\boxed{6}$ $\boxed{1}$ J
47kΩ → 47 × 10^3 → 473 ························ RD1/4PS $\boxed{4}$ $\boxed{7}$ $\boxed{3}$ J
0.5Ω → 0R5 ·· RN2H $\boxed{0}$ $\boxed{R}$ $\boxed{5}$ K
1Ω → 010 ··· RS1P $\boxed{0}$ $\boxed{1}$ $\boxed{0}$ K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).
5.62kΩ → 562 × 10^1 → 5621 ················· RM1/4PC $\boxed{5}$ $\boxed{6}$ $\boxed{2}$ $\boxed{1}$ F

■ LIST OF WHOLE PCB ASSEMBLIES

Mark	Symbol and Description	Part No.					Remarks
		VSX−504S		VSX−454		VSX−464S	
		KUXJ	KCXJ	KUXJ	KCXJ	KCXJ	
	FM/AM TUNER MODULE	AXQ3112	AXQ3112	AXQ3112	AXQ3112	AXQ3112	
NSP	MOTHER assy	AWK7124	AWK7124	AWK7127	AWK7127	AWK7127	
	├─ PS AND FUNC assy	AWZ7597	AWZ7597	AWZ7601	AWZ7601	AWZ7601	
	├─ VOL. assy	AWZ7602	AWZ7602	AWZ7602	AWZ7602	AWZ7602	
NSP	├─ TRANS assy	AWZ7591	AWZ7591	AWZ7591	AWZ7591	AWZ7591	
	└─ REG assy	AWZ7592	AWZ7592	AWZ7592	AWZ7592	AWZ7592	
NSP	FL AND AMP assy	AWK7125	AWK7125	AWK7128	AWK7128	AWK7128	
	├─ FL AND UCOM assy	AWZ7599	AWZ7599	AWZ7603	AWZ7603	AWZ7603	
NSP	├─ H. P. assy	AWZ7594	AWZ7594	AWZ7594	AWZ7594	AWZ7594	
	├─ AMP assy	AWZ7579	AWZ7579	AWZ7579	AWZ7579	AWZ7579	
	├─ AMP assy 200W	AWZ7581	AWZ7581	Not used	Not used	Not used	
	└─ AMP assy 120W	Not used	Not used	AWZ7580	AWZ7580	AWZ7580	

■ CONTRAST OF PCB ASSEMBLIES

PS AND FUNC ASSY

AWZ7597 and AWZ7601 have the same construction except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWZ7597	AWZ7601	
	D422−D424	1SR139−100	Not used	
	D472	1SS252	Not used	
	C413, C414 (12000μF/80V)	ACH7010	Not used	
	C413, C414 (8200μF/71V)	Not used	ACH7018	
	C415	CEAS102M25	CEAS471M25	
	RY401	ASR1036	ASR1044	
	R439	RD1/2PM470J	RD1/2PM680J	
	R1812, R1827	RD1/8PM392J	RD1/8PM562J	

FL AND UCOM ASSY

AWZ7599 and AWZ7603 have the same construction except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWZ7599	AWZ7603	
	D956	1SS252	Not used	
	S907−S909	ASG1034	Not used	

AMP ASSY 200W (AWZ7581) AND AMP ASSY 120W (AWZ7580)

AWZ7581 and AWZ7580 have the same construction except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWZ7581	AWZ7580	
	Q211, Q212	2SC2705	Not used	
	Q213, Q214	2SA1145	Not used	
	C213−C216	CCCSL151K500	Not used	
	VR201, VR202	VRTS6HS102	Not used	
	R211, R212	RD1/4PMF821J	RD1/8PM821J	
	R213−R216	RD1/4PMF270J	RD1/8PM270J	
	R233, R234	RD1/2PM562J	RD1/2PM392J	
	R235, R236	RN1/4PC3001F	RN1/4PC1501F	
	R237, R238	RN1/4PC8200F	RN1/4PC6800F	
	R239−R242	RF1/4PS101J	RF1/4PS470J	
	R243−R246	RD1/4PMF271J	Not used	
	R251−R254	RD1/4PMF470J	Not used	
	R259−R262	RF1/4PS4R7J	Not used	
	R267, R268 (0.33Ω/5W)	ACN7001	Not used	
	R281−R284	RD1/4PMFL222J	RD1/4PMF222J	
	R285−R288	RD1/4PMFL222J	Not used	

■ PARTS LIST FOR VSX−504S/KUXJ

Mark	No.	Description	Parts No.
FM/AM TUNER MODULE			
SEMICONDUCTORS			
	IC6201	AM/FM +MPX IC	LA1836M
	IC6202	PLL IC	LM7001J
	Q6101	DUALGATE−FETA (CHIP)	3SK194
	Q6102	TRANSISTOR	2SC2223
	Q6103	TRANSISTOR	2SC2714
	Q6104	MOS−FET	2SK302
	Q6201	NCH−FET (SMD)	2SK208
	Q6202	TRANSISTOR	2SC2712
	Q6203	TRANSISTOR	2SC2235
	Q6204	TRANSISTOR	XDA124EK
	Q6214	TRANSISTOR	2SC2714
	Q6217	TRANSISTOR	XDC124EK
	D6101, 6102	VARI−CAP DIODE	1T33

Mark	No.	Description	Parts No.
COILS AND FILTERS			
	F6101	CERAMIC FILTER	ATF−155
	F6202	AM CERAMIC FILTER	ATF1155
	F6203, 6204	CERAMIC FILTER	ATF−119
	L6101	COIL	ATC1020
	L6102	COIL	ATC1021
	L6103	TIP COIL	ATH1043
	L6104	COIL	ATC1003
	L6202, 6203	CHIP COIL	LCTA2R2J3225
	L6207	FM DETECTION COIL	ATE1013
	L6208	CHIP COIL	LCTA2R2J3225
TRANSFORMER			
	T6101	FM IF TRANS.	ATE−063
OTHERS			
	CN6201	14P SOCKET	KP200IA14L

CAPACITORS

Mark No.	Description	Parts No.
C6101	CHIP CAPACITOR	CCSQCH050C50
C6102	CERAMIC CAPACITOR	CKSQYB103K50
C6103	CHIP CAPACITOR	CKSQYB102K50
C6105	CHIP CAPACITOR	CCSQTH150J50
C6106	CHIP CAPACITOR	CKSQYB102K50
C6107	CHIP CPAPCITOR	CCSCH010C50
C6108	CHIP CAPACITOR	CCSQCH101J50
C6109	CERAMIC CAPACITOR	CKSQYB103K50
C6110	CHIP CAPACITOR	CCSQCH020C50
C6111	CHIP CERAMIC C.	CCSQCH150J50
C6112	CHIP CAPACITOR	CKSQYB102K50
C6113	CHIP CAPACITOR	CCSQRH180J50
C6114	CHIP CAPACITOR	CCSQRH080D50
C6115	CHIP CAPACITOR	CCSQCH330J50
C6116	CHIP CERAMIC C.	CCSQCH150J50
C6117	CERAMIC CAPACITOR	CKSQYB103K50
C6202	CAPACITOR (CERAMIC)	ACG1051
C6203	CHIP CAPACITOR	CCSQCH101J50
C6204	CHIP CAPACITOR	CKSQYB102K50
C6208	CHIP CERAMIC C.	CCSQCH150J50
C6209	CERAMIC CAPACITOR	CKSQYB473K50
C6210	CERAMIC CAPACITOR	CKSQYB103K50
C6212	CHIP CAPACITOR	CKSQYF103Z50
C6213	CHIP CAPACITOR	CKSQYB223K50
C6214	AUDIO FILM CAPACITOR	CFTXA224J50
C6215	AUDIO FILM CAPACITOR	CFTXA103J50
C6216, 6217	ELECT. CAPACITOR	CEAS330M16
C6218	CHIP CAPACITOR	CKSQYF103Z50
C6219	ELECT. CAPACITOR	CEAS470M10
C6220	CHIP CAPACITOR	CKSQYF223Z50
C6221, 6222	CHIP CERAMIC C.	CCSQCH150J50
C6223	CHIP CAPACITOR	CKSYF103Z50
C6224	ELECT. CAPACITOR	CEAS100M50
C6225	CERAMIC CAPACITOR	CKSQYF473Z50
C6226	CHIP CAPACITOR	CKSQYF223Z50
C6227	ELECT. CAPACITOR	CEAS470M25
C6228	CERAMIC CAPACITOR	CKSQYB472K50
C6229	CERAMIC CHIP C.	CCSCH821J50
C6230	CERAMIC CAPACITOR	CKSQYB333K50
C6231	ELECT. CAPACITOR	CEAS3R3M50
C6232	CERAMIC CAPACITOR	CKSYB333K50
C6233	ELECT. CAPACITOR	CEAS3R3M50
C6234	CAPACITOR (CERAMIC)	ACG1051
C6235	CERAMIC CAPACITOR	CKSQYF224Z25
C6236	CAPACITOR (CERAMIC)	ACG1051
C6237	CERAMIC CAPACITOR	CKSQYB473K50
C6238	ELECT. CAPACITOR	CEJA100M16
C6239	CHIP CAPACITOR	CKSQYF223Z50
C6241	CERAMIC CAPACITOR	CKSQYF473Z50
C6242	CHIP CAPACITOR	CKSQYF223Z50
C6243−6245	ELECT. CAPACITOR	CEAS470M16
C6246	ELECT. CAPACITOR	CEAS100M50
C6249, 6250	ELECT. CAPACITOR	CEJA4R7M35
C6251	CHIP CAPACITOR	CKSYB472K50
C6252	CERAMIC CAPACITOR	CKSQYB472K50
C6255	CHIP CAPACITOR	CKSQYF223Z50
C6261	ELECT. CAPACITOR	CEAS010M50
C6262	ELECT. CAPACITOR	CEAS100M50
C6263	CHIP CAPACITOR	CKSYF473Z50
C6264	CERAMIC CAPACITOR	CKSQYB103K50
C6265	CERAMIC CAPACITOR	CKSQYB473K50
C6266	CERAMIC CAPACITOR	CKSQYF473Z50
C6267	CERAMIC CAPACITOR	CKSQYB473K50
C6268	CHIP CAPACITOR	CCSQCH101J50

RESISTORS

Mark No.	Description	Parts No.
VR6201	VARIABLE RESISTOR (10kΩ)	ACP1056
VR6202	VARIABLE RESISTOR	VRTB6VS223
R6101	CHIP RESISTOR	RS1/8S470J
R6113, 6116	CHIP RESISTOR	RS1/8S000J
R6118	CHIP RESISTOR	RS1/8S000J
R6209	CHIP RESISTOR	RS1/8S221J
R6211	CHIP RESISTOR	RS1/8S103J
R6237	CHIP RESISTOR	RS1/8S182J
R6239	CHIP RESISTER	RS1/8S332J
R6243, 6244	CHIP RESISTOR	RS1/8S101J
R6268−6271	CHIP RESISTOR	RS1/8S000J
R6275, 6276	CHIP RESISTOR	RS1/8S000J
R6278, 6283	CHIP RESISTOR	RS1/8S000J
R6284, 6290	CHIP RESISTOR	RS1/8S000J
R6293, 6294	CHIP RESISTOR	RS1/8S000J
R6297	CHIP RESISTOR	RS1/8S000J
R6299, 6300	CARBON FILM RESISTOR	RD1/8PM102J
	Other Resistors	RS1/10S□□□J

OTHERS

Mark No.	Description	Parts No.
	AM RF TUNING BLOCK	AXX1025
BN6201	TERMINAL 4−P	AKA1016
X6201	CRYSTAL RESONATOR	ASS1066
X6202	CERAMIC RESONATOR	ATF1027
X6203	CRYSTAL RESONATOR	ASS1042

PS AND FUNC ASSY

SEMICONDUCTORS

Mark No.	Description	Parts No.
IC1801, 1802	OP−AMP IC	NJM4558D−D
IC1803	IC	LV1010N
IC1804	IC	LA2785
IC701	OP−AMP IC	NJM4558D−D
IC702	LOGIC IC	BU4052BC
IC703	E−SW IC	TC9163AN
IC704	OP−AMP IC	NJM4558D−D
IC801	VIDEO SEITCH	LA7952
Q1801	TRANSISTOR	2SD468
Q402−404	TRANSISTOR	DTC143ES
Q406	TRANSISTOR	2SA1515
Q407−409	TRANSISTOR	2SC1740S
Q416	TRANSISTOR	2SC1740S
Q417	TRANSISTOR	DTC143ES
Q418	TRANSISTOR	2SC2878
Q419, 420	TRANSISTOR	2SA933S
Q421	TRANSISTOR	DTC124ES
Q422	TRANSISTOR	2SA933S
Q423	TRANSISTOR	DTC124ES
Q470	TRANSISTOR	2SA933S
Q471	TRANSISTOR	DTC124ES
Q481, 482	TRANSISTOR	2SC2878
Q483	TRANSISTOR	DTA143ES
Q485, 486	TRANSISTOR	2SC2878
Q707, 708	TRANSISTOR	DTA143ES
Q791, 792	TRANSISTOR	2SC1740S
Q801	TRANSISTOR	2SC1740S
Q802	TRANSISTOR	2SC2878
D1809−1812	DIODE	1SS252
D1813	ZENER DIODE	MTZJ9.1C
D402−404	DIODE	1SS252
D407	DIODE	1SS252
D408	ZENER DIODE	MTZJ4.3C
D411	DIODE	1SS252
D412	ZENER DIODE	MTZJ18C
D415	DIODE	1SS252

Mark	No.	Description	Parts No.
	D416	ZENER DIODE	MTZJ5.1A
	D417	ZENER DIODE	MTZJ5.6C
	D418	DIODE	1SS252
	D419	ZENER DIODE	MTZJ5.6A
	D420	DIODE	1SS252
	D421	DIODE	D5SBA20 (B)
	D422−425	DIODE	1SR139−100
	D426	DIODE	1SS252
	D427−430	DIODE	1SR139−100
	D433	DIODE	D5SBA20 (B)
	D435−437	DIODE	1SS252
	D438−441	ZENER DIODE	MTZJ18B
	D470, 472	DIODE	1SS252
	D473−475	DIODE	1SS252
	D491−495	DIODE	1SS252
	D703, 801	DIODE	1SS252

RELAYS

Mark	No.	Description	Parts No.
	RY401	RELAY	ASR1036
	RY402, 403	RELAY	ASR1044
	RY404, 405	RELAY	ASR7001
	RY407, 408	RELAY	ASR7001

TRANSFORMER

Mark	No.	Description	Parts No.
	T401	POWER TRANSFORMER	ATT1223

CAPACITORS

Mark	No.	Description	Parts No.
	C1801−1803	CERAMIC CAPACITOR	CCCCH101J50
	C1804	ELECT. CAPACITOR	CEAS2R2M50
	C1806	ELECT. CAPACITOR	CEAS100M50
	C1807	ELECT. CAPACITOR	CEAS2R2M50
	C1808	CERAMIC CAPACITOR	CKCYX104M25
	C1809	ELECT. CAPACITOR	CEAS100M50
	C1810	ELECT. CAPACITOR	CEAS2R2M50
	C1811	CERAMIC CAPACITOR	CKCYX104M25
	C1812	ELECT. CAPACITOR	CEAS100M50
	C1813	ELECT. CAPACITOR	CEAS2R2M50
	C1814	CERAMIC CAPACITOR	CKCYX104M25
	C1815	ELECT. CAPACITOR	CEAS100M50
	C1816	ELECT. CAPACITOR	CEAS470M25
	C1817	ELECT. CAPACITOR	CEAS221M16
	C1819	ELECT. CAPACITOR	CEAS221M10
	C1820	AUDIO FILM CAPACITOR	CFTXA333J50
	C1821	PLASTIC FILM CAPACITOR	CQMA152J50
	C1822	AUDIO FILM CAPACITOR	CFTXA333J50
	C1823	ELECT. CAPACITOR	CEAS010M50
	C1825	ELECT. CAPACITOR	CEAS2R2M50
	C1826	ELECT. CAPACITOR	CEAS100M50
	C1830	PLASTIC FILM CAPACITOR	CQMA681J50
	C1831−1833	ELECT. CAPACITOR	CEAS100M50
	C1834	ELECT. CAPACITOR	CEAS470M25
	C1835, 1836	AUDIO FILM CAPACITOR	CFTXA104J50
	C1837	ELECT. CAPACITOR	CEASR47M50
	C1838	ELECT. CAPACITOR	CEANL4R7M50
	C1839	ELECT. CAPACITOR	CEASR47M50
	C1840	ELECT. CAPACITOR	CEANL4R7M50
	C1841	ELECT. CAPACITOR	CEASR15M50
	C1842	ELECT. CAPACITOR	CEANL3R3M50
	C1843	AUDIO FILM CAPACITOR	CFTXA154J50
	C1844	PLASTIC FILM CAPACITOR	CQMA223J50
	C1845	PLASTIC FILM CAPACITOR	CQMA473J50
	C1846	ELECT. CAPACITOR	CEAS221M16
	C1847−1850	ELECT. CAPACITOR	CEAS100M50
	C1851	ELECT. CAPACITOR	CEAS221M16
	C1852, 1853	ELECT. CAPACITOR	CEAS100M50
	C1854, 1855	AUDIO FILM CAPACITOR	CFTXA104J50
	C1856	ELECT. CAPACITOR	CEASR47M50
	C1857	ELECT. CAPACITOR	CEANL4R7M50
	C1858	ELECT. CAPACITOR	CEASR47M50
	C1859	ELECT. CAPACITOR	CEANL4R7M50
	C1860	ELECT. CAPACITOR	CEASR15M50
	C1861	ELECT. CAPACITOR	CEANL3R3M50
	C1862	AUDIO FILM CAPACITOR	CFTXA154J50
	C1863	AUDIO FILM CAPACITOR	CFTXA474J50
	C1864, 1865	CERAMIC CAPACITOR	CKCYX473M25
	C400	ELECT. CAPACITOR	CEAS470M25
	C406	ELECT. CAPACITOR	CEAS221M16
	C407	ELECT. CAPACITOR	CEAS470M50
	C410	ELECT. CAPACITOR	CEAS100M50
	C412	ELECT. CAPACITOR	CEAS470M25
	C413, 414	ELECT. CAPACITOR (12000μF/80V)	ACH7010
	C415	ELECT. CAPACITOR	CEAS102M25
	C416	ELECT. CAPACITOR	CEAS102M35
	C417	ELECT. CAPACITOR	CEAS222M35
	C418	CKA (0.01μF/AC250V)	ACG1005
	C419	CERAMIC CAPACITOR	CKCYX104M25
	C420	CKA (0.01μF/AC400V)	ACG1054
	C421	CKA (0.01μF/AC250V)	ACG1005
	C422	CKA (0.01μF/AC400V)	ACG1054
	C713, 714	ELECT. CAPACITOR	CEAS100M50
	C727, 728	CERAMIC CAPACITOR	CCCSL221J50
	C729, 730	ELECT. CAPACITOR	CEAS101M25
	C733, 734	PLASTIC FILM CAPACITOR	CQMA822J50
	C735, 736	PLASTIC FILM CAPACITOR	CQMA242J50
	C737, 738	ELECT. CAPACITOR	CEAS2R2M50
	C739, 740	ELECT. CAPACITOR	CEAS470M25
	C741, 742	CERAMIC CAPACITOR	CKCYB102K50
	C743, 744	ELECT. CAPACITOR	CEAS100M50
	C745, 746	CERAMIC CAPACITOR	CKCYF103Z50
	C747	CERAMIC CAPACITOR	CKCYB102K50
	C748	ELECT. CAPACITOR	CEAS101M25
	C749, 750	ELECT. CAPACITOR	CEAS2R2M50
	C751, 752	ELECT. CAPACITOR	CEAS4R7M50
	C753	CERAMIC CAPACITOR	CKCYF103Z50
	C754	ELECT. CAPACITOR	CEAS101M25
	C755	CERAMIC CAPACITOR	CKCYF103Z50
	C801, 802	ELECT. CAPACITOR	CEAS4R7M50
	C803, 804	ELECT. CAPACITOR	CEAS471M6
	C806	ELECT. CAPACITOR	CEAS470M25
	C809, 810	ELECT. CAPACITOR	CEAS101M25
	C811, 812	CERAMIC CAPACITOR	CKCYF473Z50

RESISTORS

Mark	No.	Description	Parts No.
	R417	RESISTOR (150Ω, 5W)	ACN7002
	R431	METAL OXIDE RESISTOR	RS2LMF101J
	R433	METAL OXIDE RESISTOR	RS2LMF151J
	R439	CARBON FILM RESISTOR	RD1/2PM470J
	R440	CARBON FILM RESISTOR	RD1/2PM560J
	R441	RESISTOR (2.2MΩ, 1/2W)	ACN−208
	R447, 448	METAL OXIDE RESISTOR	RS2LMF331J
	R494	CARBON FILM RESISTOR	RD1/2PMF820J
	R807	CARBON FILM RESISTOR	RD1/2PM271J
		Other Resistors	RD1/8PM□□□J

OTHERS

Mark	No.	Description	Parts No.
		CABLE HOLDER (7P)	AKT1080
		CABLE HOLDER (12P)	AKT1085
		CABLE HOLDER (6P)	AKT1079
		CABLE HOLDER	AKT1007
		AC SOCKET 1−P	AKP1060
	CN401	SPEAKER TERMINAL 6−P	AKE7005
	CN402	CONNECTOR (7P)	KPE7

Mark	No.	Description	Parts No.
	CN404	2P PIN JACK	AKB7001
	CN407	JACK	AKN1006
	CN420	40P SOCKET	AKP1085
	CN421	SPEAKER TERMINAL 8−P	AKE7006
	CN701	14P PLUG	KM200IA14
	CN702	PIN JACK (12P)	AKB7004
	CN703	6P PIN JACK (TAPE2)	AKB7003
	CN805	15P PLUG	53290−1510
	X1801	CERAMIC RESONATOR	ASS1015

VOL. ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC601	OP−AMP IC	NJM4558D−D
	IC602	OP−AMP IC	NJM4558LD
	IC603	OP−AMP IC	NJM4558D−D
	IC604	MECHANISM DRIVER IC	TA8409S
	Q602−605	TRANSISTOR	2SC2878
	D601, 602	DIODE	1SS252
	D603	ZENER DIODE	MTZJ5.1B

CAPACITORS

Mark	No.	Description	Parts No.
	C617	ELECT. CAPACITOR	CEASR47M50
	C618	ELECT. CAPACITOR	CEANP101M10
	C619	ELECT. CAPACITOR	CEAS101M25
	C626	CERAMIC CAPACITOR	CKCYF473Z50
	C631−638	ELECT. CAPACITOR	CEAS100M50

RESISTORS

Mark	No.	Description	Parts No.
	VR601	VARIABLE RESISTOR	ACX7005
		Other Resistors	RD1/8PM□□□J

OTHERS

Mark	No.	Description	Parts No.
		CABLE HOLDER	AKT1012
	CN604	15P SOCKET	52418−1510

TRANS ASSY

OTHERS

Mark	No.	Description	Parts No.
		CABLE HOLDER (6P)	AKT1079

REG. ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC451, 452	REGULATOR IC	NJM78M12FAS
	IC453	REGULATOR IC	NJM79M12FA
	Q410	TRANSISTOR	DTA124ES
	Q411	TRANSISTOR	DTC124ES
	Q413	TRANSISTOR	2SC4793
	Q424	TRANSISTOR	2SC1740S
	D409	ZENER DIODE	MTZJ13B
	D410	ZENER DIODE	MTZJ12B

CAPACITORS

Mark	No.	Description	Parts No.
	C450	CERAMIC CAPACITOR	CKCYF102Z50
	C451	ELECT. CAPACITOR	CEAS101M25
	C452	CERAMIC CAPACITOR	CKCYF102Z50
	C453	ELECT. CAPACITOR	CEAS101M25
	C454	CERAMIC CAPACITOR	CKCYF102Z50
	C455	ELECT. CAPACITOR	CEAS101M25
	C456	CERAMIC CAPACITOR	CKCYF103Z50

RESISTORS

Mark	No.	Description	Parts No.
	R420	METAL OXIDE RESISTOR	RS2LMF222J
	R421	CARBON FILM RESISTOR	RD1/4PMF2R2J
	R422, 423	METAL OXIDE RESISTOR	RS2LMF330J
	R430	METAL OXIDE RESISTOR	RS2LMF821J
	R435	METAL OXIDE RESISTOR	RS1LMF4R7J
	R436, 437	METAL OXIDE RESISTOR	RS2LMF330J
	R443	CARBON FILM RESISTOR	RD1/8PM223J

OTHERS

Mark	No.	Description	Parts No.
		CABLE HOLDER	AKT1007

FL AND UCOM ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC901	PORT−EXPANDER IC	M66320P
	IC902	CONTROL MCU	PDG133A
	IC951, 952	OP−AMP IC	NJM4558D−D
	Q902, 903	TRANSISTOR	2SC1740S
	Q907, 908	TRANSISTOR	DTC143ES
	Q909	TRANSISTOR	DTC124ES
	Q951, 952	TRANSISTOR	2SC1740S
	Q953, 954	TRANSISTOR	DTC143ES
	D2104−2106	DIODE	1SS252
	D902	DIODE	1SS252
	D906−909	LED	AEL1100
	D910−918	DIODE	1SS252
	D920−923	DIODE	1SS252
	D953	ZENER DIODE	MTZJ2.7
	D956, 958	DIODE	1SS252

SWITCHES

Mark	No.	Description	Parts No.
	S901	SWITCH	ASG1034
	S903−905	SWITCH	ASG1034
	S907−909	SWITCH	ASG1034
	S912−919	SWITCH	ASG1034
	S921−926	SWITCH	ASG1034
	S928, 929	SWITCH	ASG1034
	S941	ROTARY ENCODER	ASX1015

COIL

Mark	No.	Description	Parts No.
	L901	AXIAL INDUCTOR	LAU220K

CAPACITORS

Mark	No.	Description	Parts No.
	C2104	ELECT. CAPACITOR	CEAS221M10
	C901	CERAMIC CAPACITOR	CKPUYF103Z25
	C902	CERAMIC CAPACITOR	CKCYX103M25
	C903	ELECT. CAPACITOR	CEAS101M10
	C904	CERAMIC CAPACITOR	CKDYF102Z50
	C905	CERAMIC CAPACITOR	CKCYF473Z50
	C906	ELECT. CAPACITOR	CEAS0R1M50
	C907	ELECT. CAPACITOR	CEAS100M50
	C908	CAPACITOR	ACH7013
	C909	ELECT. CAPACITOR	CEJA101M10
	C910	CERAMIC CAPACITOR	CKCYF473Z50
	C911	ELECT. CAPACITOR	CEJA221M6
	C951, 952	CERAMIC CAPACITOR	CCCSL151J50
	C953, 954	AUDIO FILM CAPACITOR	CFTXA153J50
	C955, 956	ELECT. CAPACITOR	CEJAR47M50
	C957, 958	ELECT. CAPACITOR	CEJA100M50
	C959, 960	ELECT. CAPACITOR	CEJA0R1M50
	C961, 962	AUDIO FILM CAPACITOR	CFTXA153J50
	C963, 964	AUDIO FILM CAPACITOR	CFTXA823J50
	C965	ELECT. CAPACITOR	CEJA4R7M35
	C966	ELECT. CAPACITOR	CEAS4R7M50
	C967	ELECT. CAPACITOR	CEJA100M16
	C968	ELECT. CAPACITOR	CEAS100M50
	C993	CERAMIC CAPACITOR	CKCYB152K50
	C994	CERAMIC CAPACITOR	CKCYB102K50

Mark	No.	Description	Parts No.
	RESISTORS		
	VR951, 952	VARIABLE RESISTOR	ACS1106
	VR953	VARIABLE RESISTOR (500K−X1)	ACS1016
	R912−916	CARBON FILM RESISTOR	RD1/2PM332J
	R989, 990	CARBON FILM RESISTOR	RD1/2PM332J
		Other Resistors	RD1/8PM□□□J
	OTHERS		
		REMOTE RECEIVER UNIT	AXX1023
	CN901	40P SOCKET	AKP1087
	V901	FL TUBE	AAV7013
	X901	CERAMIC RESONATOR	ASS1015
	H. P. ASSY		
	OTHERS		
		JACK	AKN7001
		CABLE HOLDER (3P)	AKT1076
	AMP ASSY		
	SEMICONDUCTORS		
	IC301	IC	UPC4570C
	Q301, 302	TRANSISTOR	2SC2705
	Q303−306	TRANSISTOR	2SA1145
	Q307, 308	TRANSISTOR	2SC2705
	Q381, 382	TRANSISTOR	2SC2240
	D301−308	DIODE	1SS252
	D309−312	ZENER DIODE	MTZJ3.3
	D381−386	DIODE	1SS252
	CAPACITORS		
	C301, 302	ELECT. CAPACITOR	CEAS2R2M50
	C303, 304	CERAMIC CAPACITOR	CKCYB471K50
	C305, 306	ELECT. CAPACITOR	CEAS101M50
	C307−310	CERAMIC CAPACITOR	CCCSL151K500
	C311, C312	ELECT. CAPACITOR	CEAS2R2M50
	C317−320	AUDIO FILM CAPACITOR	CFTXA104J50
	C381, 382	ELECT. CAPACITOR	CEAS2R2M50
	C383, 384	ELECT. CAPACITOR	CEAS101M25
	C385	CKA (0.01μF/AC250V)	ACG1005
	RESISTORS		
	R313−316	CARBON FILM RESISTOR	RD1/4PMF270J
	R321−324	CARBON FILM RESISTOR	RD1/4PMF511J
	R329−332	CARBON FILM RESISTOR	RD1/4PMF680J
	R333, 334	CARBON FILM RESISTOR	RD1/2PM392J
	R347−350	FUSIBLE RESISTOR	RF1/4PS4R7J
	R351−354	FUSIBLE RESISTOR	RF1/4PS470J
	R355−358	CARBON FILM RESISTOR	RD1/4PMF151J
	R363−366	FUSIBLE RESISTOR	RF1/4PS4R7J
	R369, 370	RESISTOR (0.33Ω, 5W)	ACN7001
	R371, 372	METAL OXIDE RESISTOR	RS2LMF100J
	R381−384	CARBON FILM RESISTOR	RD1/4PMF222J
	R395, 396	CARBON FILM RESISTOR	RD1/4PMF101J
	R397	METAL OXIDE RESISTOR	RS2LMF104J
	R399	FUSIBLE RESISTOR	RF1/4PS4R7J
		Other Resistors	RD1/8PM□□□J
	OTHERS		
		CABLE HOLDER (8P)	AKT1081
⚠	TH1	THERMISTOR	150−203−73002

Mark	No.	Description	Parts No.
	AMP ASSY 200W		
	SEMICONDUCTORS		
	IC201	IC	UPC4570C
	Q201, 202	TRANSISTOR	2SC2705
	Q203−206	TRANSISTOR	2SA1145
	Q207, 208	TRANSISTOR	2SC2705
	Q211, 212	TRANSISTOR	2SC2705
	Q213, 214	TRANSISTOR	2SA1145
	Q281, 282	TRANSISTOR	2SC2240
	D201−208	DIODE	1SS252
	D209−212	ZENER DIODE	MTZJ3.3
	D213, 214	DIODE	1SS252
	D215−218	ZENER DIODE	MTZJ22D
	D219, 220	DIODE	1SS252
	D281−286	DIODE	1SS252
	CAPACITORS		
	C201, 202	ELECT. CAPACITOR	CEAS2R2M50
	C203, 204	CERAMIC CAPACITOR	CKCYB471K50
	C205, 206	ELECT. CAPACITOR	CEAS101M50
	C207−210	CERAMIC CAPACITOR	CCCSL560K500
	C211, 212	ELECT. CAPACITOR	CEAS2R2M50
	C213−216	CERAMIC CAPACITOR	CCCSL151K500
	C217−220	AUDIO FILM CAPACITOR	CFTXA104J50
	C281, 282	ELECT. CAPACITOR	CEAS2R2M50
	C283, 284	ELECT. CAPACITOR	CEAS101M25
	C285	CKA (0.01μF/AC250V)	ACG1005
	RESISTORS		
	R211, 212	CARBON FILM RESISTOR	RD1/4PMF821J
	R213−216	CARBON FILM RESISTOR	RD1/4PMF270J
	R221−224	CARBON FILM RESISTOR	RD1/4PMF102J
	R229−232	CARBON FILM RESISTOR	RD1/4PMF680J
	R233, 234	CARBON FILM RESISTOR	RD1/2PM562J
	R235, 236	METALFILM RESISTER	RN1/4PC3001F
	R237, 238	METALFILM RESISTER	RN1/4PC8200F
	R239−242	FUSIBLE RESISTOR	RF1/4PS101J
	R243−246	CARBON FILM RESISTOR	RD1/4PMF271J
	R247−250	FUSIBLE RESISTOR	RF1/4PS4R7J
	R251−254	CARBON FILM RESISTOR	RD1/4PMF470J
	R255−258	CARBON FILM RESISTOR	RD1/4PMF151J
	R259−266	FUSIBLE RESISTOR	RF1/4PS4R7J
	R267−270	RESISTOR (0.33Ω, 5W)	ACN7001
	R271, 272	METAL OXIDE RESISTOR	RS2LMF100J
	R281−288	CARBON FILM RESISTOR	RD1/4PMFL222J
	R295, 296	CARBON FILM RESISTOR	RD1/4PMF101J
		Other Resistors	RD1/8PM□□□J
	OTHERS		
		CABLE HOLDER (8P)	AKT1081
	CN201	CONNECTOR (5P)	KPE5
	CN203	CONNECTOR (4P)	KPE4
	CN204, 205	4P PLUG	KM200IA4

6. ADJUSTMENTS

ADJUSTMENT OF FM TUNER SECTION

- Set the FM/AM selector to FM BAND.
- Connect the wiring as shown in Fig. 1−1.

Step No.	Adjustment Title	FM SG (1kHz, ±75kHz dev.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (MHz)	Level (dBμV)			
1	Center Adjustment	98	80	98.0 MHz	L6207	Adjust so that the DC voltage between IC6201-Pin 4 and Pin 28 (or ⊕ leads of C6224 and C6261) becomes 0V±50mV.
2	Front-end Sensitivity Adjustment	98	Low input (0 to 30)	98 MHz	L6102 T6101	Adjust so that the DC voltage between IC6201-Pin 12 and GND (or ⊕ leads of C6238 and GND) becomes at maximum level.
3	Stereo Distortion	98	80	98 MHz	T6101	Minimize the distortion with 1/8 rotation of the core.
4	TUNED IND. Lighting Level	98	15 (±2 dB)	98.0 MHz	VR6201	Adjust so that the indicator of TUNED IND. starts to light up.

Notes:

- *Before adjusting, make sure there is no gap between L6101 and L6102. If there is a gap between them, bring them into contact with each other first, and then make adjustments.*
- *Make indicator adjustments in order of AM → FM.*
- *Adjustment sequence: L6102 T6101*

ADJUSTMENT OF MW TUNER SECTION

- Set the FM/AM selector to AM (MW) BAND.
- Connect the wiring as shown in Fig. 1−1.

Step No.	Adjustment Title	AM SG (400Hz, 30% Mod.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (kHz)	Level (dBμV/m)			
1	TUNED IND. Lighting Level	999*1	47 (±2dB)	999 kHz*1	VR6202	Adjust so that the indicator of TUNED IND. starts to light up.

**1: For the area using 10 kHz step, frequencies should be 1000 kHz.*

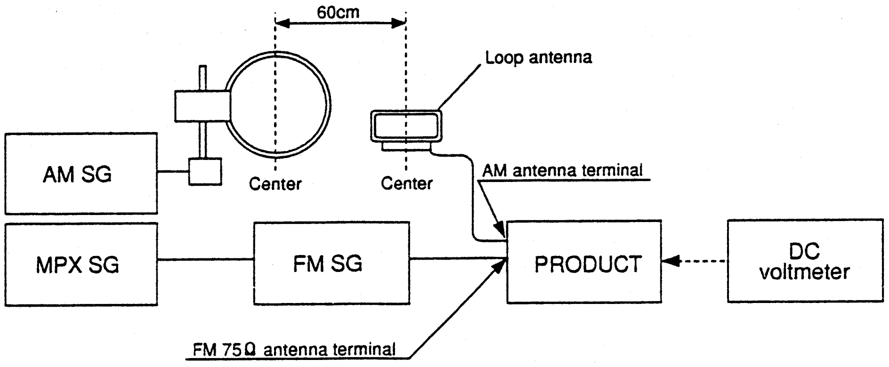


Fig. 1 − 1 AM and FM Adjustment Wiring Diagram

FM/AM TUNER MODULE

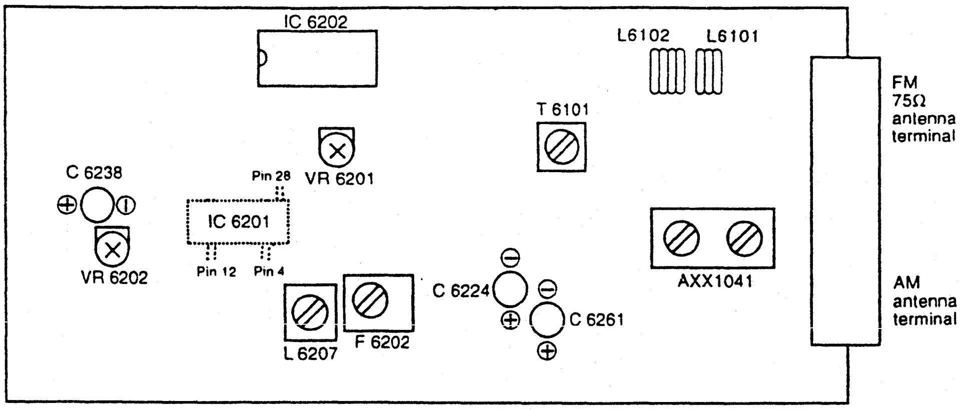

IC 6202
L6102
L6101
FM
75Ω
antenna
terminal
T 6101
C 6238
Pin 28
VR 6201
IC 6201
Pin 12
Pin 4
VR 6202
C 6224
C 6261
AXX1041
AM
antenna
terminal
L 6207
F 6202

Fig. 1—2 Adjustment Points

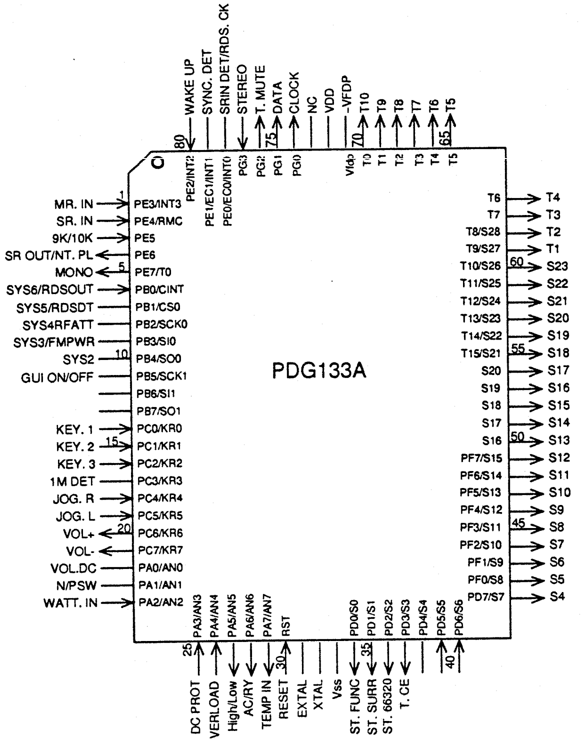
7. IC INFORMATION

- *The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.*

■ PDG133A (IC902: FL AND UCOM ASSY)

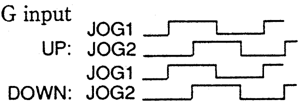
● System Micro-computer

● Pin Assignment (Top View)


PDG133A
WAKE UP
SYNC. DET
SRIN DET/RDS. CK
STEREO
T. MUTE
DATA
CLOCK
NC
VDD
-VFDP
T10
T9
T8
T7
T6
T5
80
75
70
65
PE2/INT2
PE1/EC1/INT1
PE0/EC0/INT0
PG3
PG2
PG1
PG0
Vfdp
T0
T1
T2
T3
T4
T5
MR. IN
SR. IN
9K/10K
SR OUT/NT. PL
MONO
SYS6/RDSOUT
SYS5/RDSDT
SYS4RFATT
SYS3/FMPWR
SYS2
GUI ON/OFF
KEY. 1
KEY. 2
KEY. 3
1M DET
JOG. R
JOG. L
VOL+
VOL-
VOL.DC
N/PSW
WATT. IN
1
5
10
15
20
PE3/INT3
PE4/RMC
PE5
PE6
PE7/T0
PB0/CINT
PB1/CS0
PB2/SCK0
PB3/SI0
PB4/SO0
PB5/SCK1
PB6/SI1
PB7/SO1
PC0/KR0
PC1/KR1
PC2/KR2
PC3/KR3
PC4/KR4
PC5/KR5
PC6/KR6
PC7/KR7
PA0/AN0
PA1/AN1
PA2/AN2
T6
T7
T8/S28
T9/S27
T10/S26
T11/S25
T12/S24
T13/S23
T14/S22
T15/S21
S20
S19
S18
S17
S16
PF7/S15
PF6/S14
PF5/S13
PF4/S12
PF3/S11
PF2/S10
PF1/S9
PF0/S8
PD7/S7
60
55
50
45
T4
T3
T2
T1
S23
S22
S21
S20
S19
S18
S17
S16
S15
S14
S13
S12
S11
S10
S9
S8
S7
S6
S5
S4
PA3/AN3
PA4/AN4
PA5/AN5
PA6/AN6
PA7/AN7
RST
PD0/S0
PD1/S1
PD2/S2
PD3/S3
PD4/S4
PD5/S5
PD6/S6
25
30
35
40
DC PROT
OVERLOAD
High/Low
AC/RY
TEMP IN
RESET
EXTAL
XTAL
Vss
ST. FUNC
ST. SURR
ST. 66320
T. CE

● Pin Function

No.	Pin Name	I/O	Description	Act.
1	MR. IN PE3/INT3	I	Remote control signal input from Multi-room	H
2	SR. IN PE4/RMC	I	Remote control signal input	H
3	9k/10k PE5	I	Switching destination (9k/10k) H: 10k, L: 9k	–
4	SR OUT/NT. PL PE6	O	Remote control signal output	–
5	MONO PE7/T0	O	TUNER: Execution MONO output	H
6	TUNED PB0/CINT	I	TUNER: TUNED input	L
7	SYS6/RDSOUT PB1/CS0	–	——	–
8	SYS5/RDSDT PB2/SCK0	–	——	–
9	SYS4/RFATT PB3/SI0	–	——	–
10	SYS3/FMPWR PB4/SO0	–	——	–

No.	Pin Name	I/O	Description	Act.
11	SYS2/ PB5/SCK1	–	——	–
12	GUI ON/OFF PB6/SI1	–	——	–
13	PB7/SO1	–	——	–
14	KEY. 1 PC0/KR0	I	KEY SCAN input 1	–
15	KEY. 2 PC1/KR1	I	KEY SCAN input 2	–
16	KEY. 3 PC2/KR2	I	KEY SCAN input 3	–
17	1M DET PC3/KR3	–	——	–
18	JOG. R PC4/KR4	I	JOG input  UP: JOG1 JOG2 DOWN: JOG1 JOG2	–
19	JOG. L PC5/KR5	I		
20	VOL + PC6/KR6	O	MASTER VOLUME UP output	H
21	VOL – PC7/KR7	O	MASTER VOLUME DOWN output	H
22	VOL. DC PA0/AN0	–	——	–
23	N/PSW PA1/AN1	–	——	–
24	WATT. IN PA2/AN2	I	WATT input (A/D) for fan	–
25	DC PROT PA3/AN3	I	DC input (A/D) for protection	–
26	OVERLOAD PA4/AN4	I	OVER/LOAD input (A/D) for protection	–
27	High/Low PA5/AN5	O	Switching fan rotation L: High, H: Low	–
28	AC/RY PA6/AN6	O	POWER relay ON/OFF	H
29	TEMP IN PA7/AN7	O	TEMP input (A/D) for fan	–
30	RESET RST	I	RESET input	L
31	EXTAL	–	Oscillator (8MHz)	–
32	XTAL	–		–
33	Vss	–	GND	–
34	ST. FUNC PD0/S0	I	STROB output for TC9163	H

No.	Pin Name	I/O	Description	Act.
35	ST. SURR PD1/S1	I	Chip/Enable output for LV1010 (DSP)	L
36	ST. 66320 PD2/S2	I	Chip/Enable output for M66320	H
37	T. CE PD3/S3	I	Chip/Enable output for LM7001 (PLL)	L
38	PD4/S4	–	——	–
39	PD5/S5	I	——	–
40	PD6/S6	I	——	–
41	S4 PD7/S7	O	FL segment output 4	–
42 | 49	S5 PF0/S8 | S12 PF7/S15	O	FL segment output 5/Key scan output 1 | FL segment output 12/Key scan output 8	–
50 | 52	S13 | S15	O	FL segment output 13/Key scan output 9 | FL segment output 15/Key scan output 11	–
53	S16	O	FL segment output 16	–
54	S17	O	FL segment output 17	–
55 | 60	S18 T15/S21 | S23 T10/S26	O	FL segment output 18 | FL segment output 23	–

No.	Pin Name	I/O	Description	Act.
61	T1 T9/S27	O	FL timing output 1	–
62	T2 T8/S28	O	FL timing output 2	–
63 | 70	T3 | T10	O	FL timing output 3 | FL timing output 10	–
71	−VFDP Vfdp	–	FL driver power supply	–
72	VDD	–	+5V power supply	–
73	NC	–	——	–
74	CLOCK PG0	O	CLOCK output for TC9163/M66320/LM7001/LV1010	–
75	DATA PG1	O	DATA output for TC9163/M66320/LM7001/LV1010	–
76	T. MUTE PG2	O	TUNER: MUTE	H
77	STEREO PG3	I	TUNER: STEREO input	H
78	SRin DET/RDS. CK PE0/EC0/INT0	–	——	–
79	SYNC. DET PE1/EC1/INT1	–	——	–
80	WAKE UP PE2/INT2	I	WAKE-UP (AC pulse for BACK-UP) input	–

● Key Matrix

	KO1	KO2	KO3	KO4	KO5	KO6	KO7	KO8	KO9	KO10
KI1	——	TUNER MEMORY	CD	3CH	PHONO	POWER	VIDEO	ASC1	——	DESTINATION 1
KI2	BAND	ENTER	DISP	SFC	TUNER	——	RETURN	ASC2	VCR1	DESTINATION 2
KI3	MPX	SELECT	SBASS	DOLBY	LD	SPEAKER A	SPEAKER B	ASC MONO	TAPE 2	DESTINATION 3

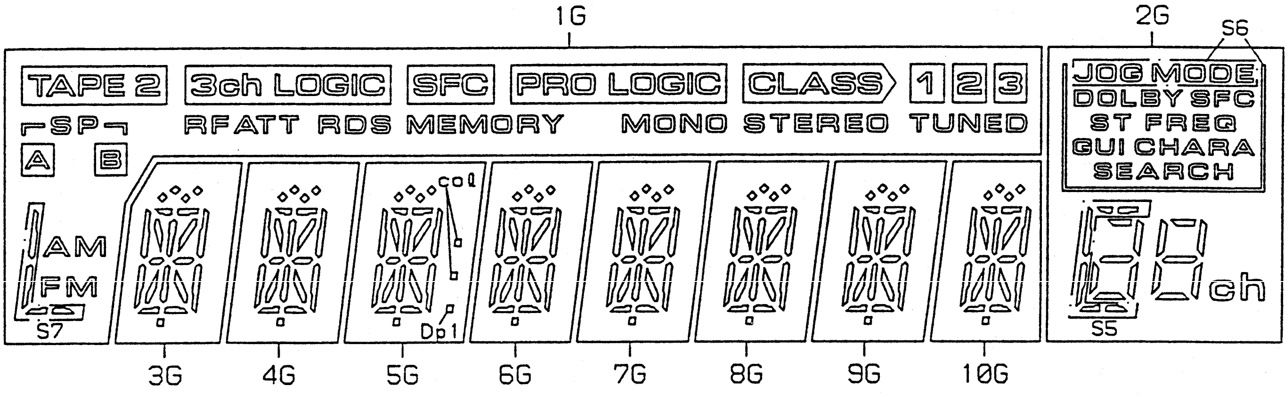
	VSX−454, VSX−464S	VSX−504S
Destination 1	OFF	OTHER
Destination 2	OFF	
Destination 3	OFF	

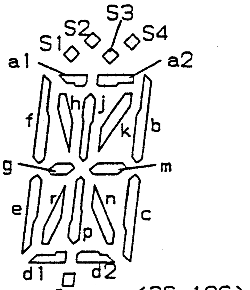
8. FL INFORMATION

■ AAV7013 (V901: FL AND UCOM ASSY)

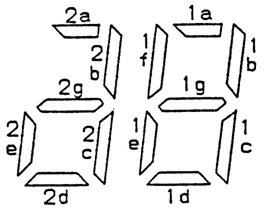
● FL TUBE

● Grid Assignment


1G
2G
S6
TAPE 2
3ch LOGIC
SFC
PRO LOGIC
CLASS
1
2
3
SP
RF ATT
RDS
MEMORY
MONO
STEREO
TUNED
A
B
JOG MODE
DOLBY SFC
ST FREQ
GUI CHARA
SEARCH
AM
FM
S7
col
Dp1
S5
ch
3G
4G
5G
6G
7G
8G
9G
10G


S3
S2
S1
S4
a1
a2
h
j
f
k
b
g
m
e
r
n
c
p
d1
d2
Dp

(3G~10G)

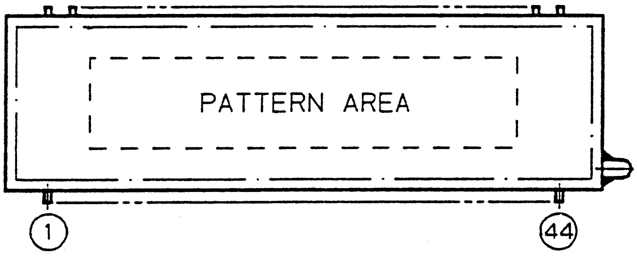

2a
1a
2b
1f
1b
2g
1g
2e
2c
1e
1c
2d
1d

(2G)

● Anode Connection

	1G	2G	3G, 4G	5G	6G~10G
P1	S7	S5	a1	a1	a1
P2	FM	2a, 2d	a2	a2	a2
P3	AM	2b	h	h	h
P4	A	2g	j	j	j
P5	B	2c	k	k	k
P 6	SP	2e	b	b	b
P 7	TAPE 2	1a	f	f	f
P 8	RF ATT	1b	m	m	m
P 9	3ch LOGIC	1f	g	g	g
P10	RDS	1g	c	c	c
P11	SFC	1c	e	e	e
P12	MEMORY	1e	r	r	r
P13	PRO LOGIC	1d	p	p	p
P14	MONO	ch	n	n	n
P15	TUNED	S6	d1	d1	d1
P16	3	SFC	d2	d2	d2
P17	2	FREQ	Dp	Dp	Dp
P18	1	CHARA	S3	S3	S3
P19	CLASS	SEARCH	S1	S1	S1
P20	STEREO	GUI	S4	S4	S4
P21	-	-	S2	S2	S2
P22	-	DOLBY	-	col	-
P23	-	ST	-	Dp1	-

● Pin Assignment


PATTERN AREA
1
44

● Pin Connection

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
CONNECTION	F1	F1	NP	NP	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G	NC	NC	NC	P23	P22	P21	P20	P19

PIN NO.	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
CONNECTION	P18	P17	P16	P15	P14	P13	P12	P11	P10	P9	P8	P7	P6	P5	P4	P3	P2	P1	NP	NP	F2	F2

NOTE 1) F1, F2 --- Filament
2) NP ------ No pin
3) NC ------ No connection
4) DL ------ Datum Line
5) 1G~10G --- Grid

9. DISASSEMBLY

CAUTION !

You will get an electric shock if you touch the Radiator (Heat-sink) when the power cord is connected to the power source. Also, the Electrolytic Capacitor contains a charge even when the power cord is unplugged, so the charge must be removed when the bonnet has been taken off.

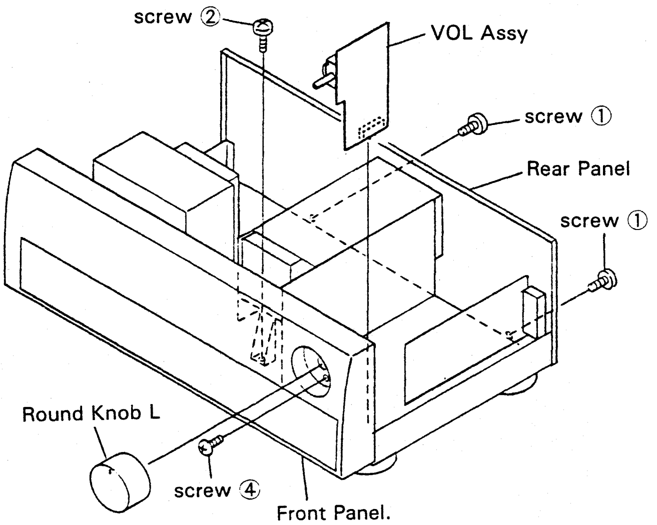
< Removing the Charge >

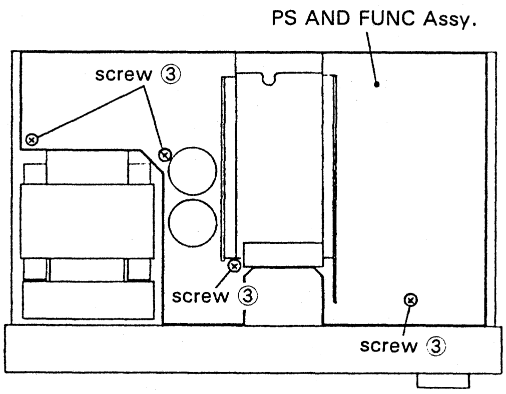
① Connect the Radiator (top side) and either the Chassis or the Rear panel for 2 to 3 seconds with a Resistor of more than 5W/10Ω.

② Connect the +B lead on the J2 and either the Chassis or the Rear panel for 2 to 3 seconds with a Resistor of more than 5W/10Ω.

9.1 PS AND FUNC ASSY

1. Remove the Bonnet case.
2. Remove the two screws ①.
3. Remove the screw ②.
4. Remove the four screws ③ holding the PS AND FUNC assy.
5. Remove the Round knob L and remove the screw ④ between the volume and the front panel.
6. Remove the VOL assy from the PS AND FUNC assy.
7. Remove the rear panel, and power block from the chassis at the same time, according to the Fig. 1


screw ②
VOL Assy
screw ①
Rear Panel
screw ①
Round Knob L
screw ④
Front Panel.


PS AND FUNC Assy.
screw ③
screw ③
screw ③

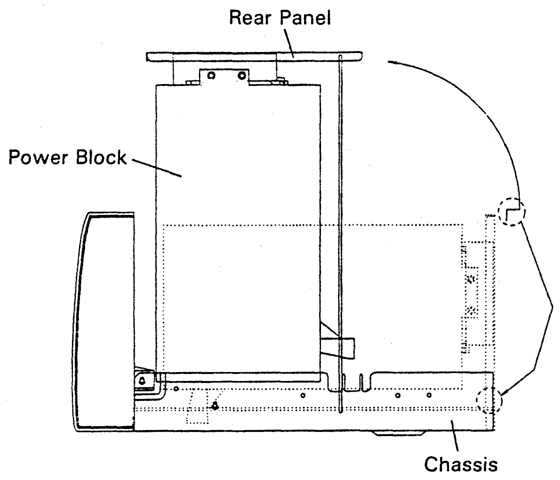
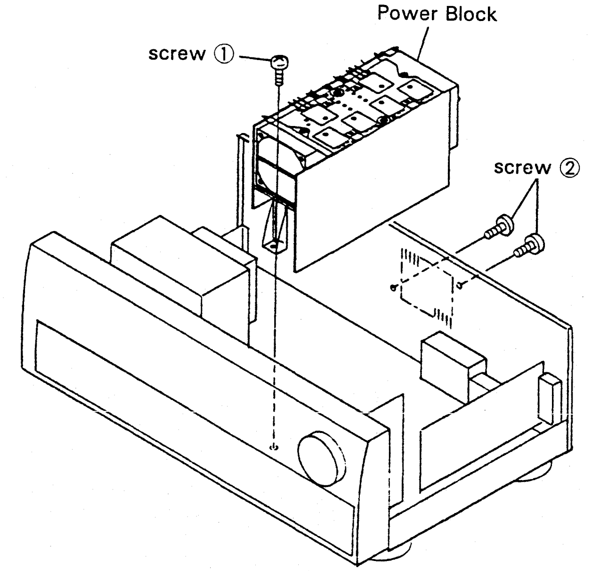

Rear Panel
Power Block
Chassis

Fig. 1

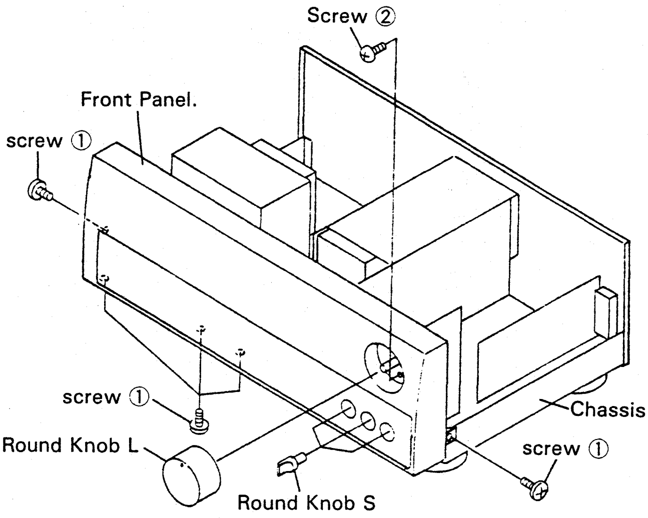
9.2 POWER BLOCK

1. Remove the Bonnet case.
2. Remove the screw ①.
3. Remove the two screws ②.


Power Block
screw ①
screw ②

9.3 FL AND UCOM ASSY

1. Remove the Bonnet case.
2. Remove the five screws ①.
3. Remove the Round knob L and remove the screw ② between the volume and the front panel.
4. Remove the front panel from the chassis (watching out for the claw on the front panel bottom).
5. Remove the three round knob S (BASS, TREBLE, BALANCE).
6. Remove the screws in Fig. 2 and remove the FL AND UCOM assy.


Screw ②
Front Panel.
screw ①
screw ①
Round Knob L
Round Knob S
Chassis
screw ①

<Location of the FL AND UCOM assy Fixing Screws>

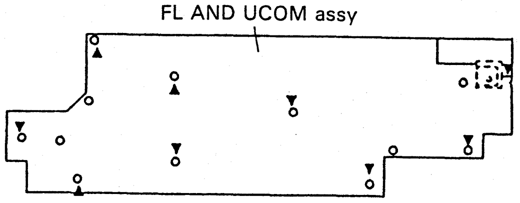

FL AND UCOM assy

Fig. 2

Points where the PCB Mold (AMR2533) is attached to the chassis: 7 points stamped on the chassis as Nos. 0, 1, 2, 3, 4, 7, and 10.

10. REMOTE CONTROL UNIT [CU–VSX095 (AXD7045)] [CU–VSX098 (AXD7056)]

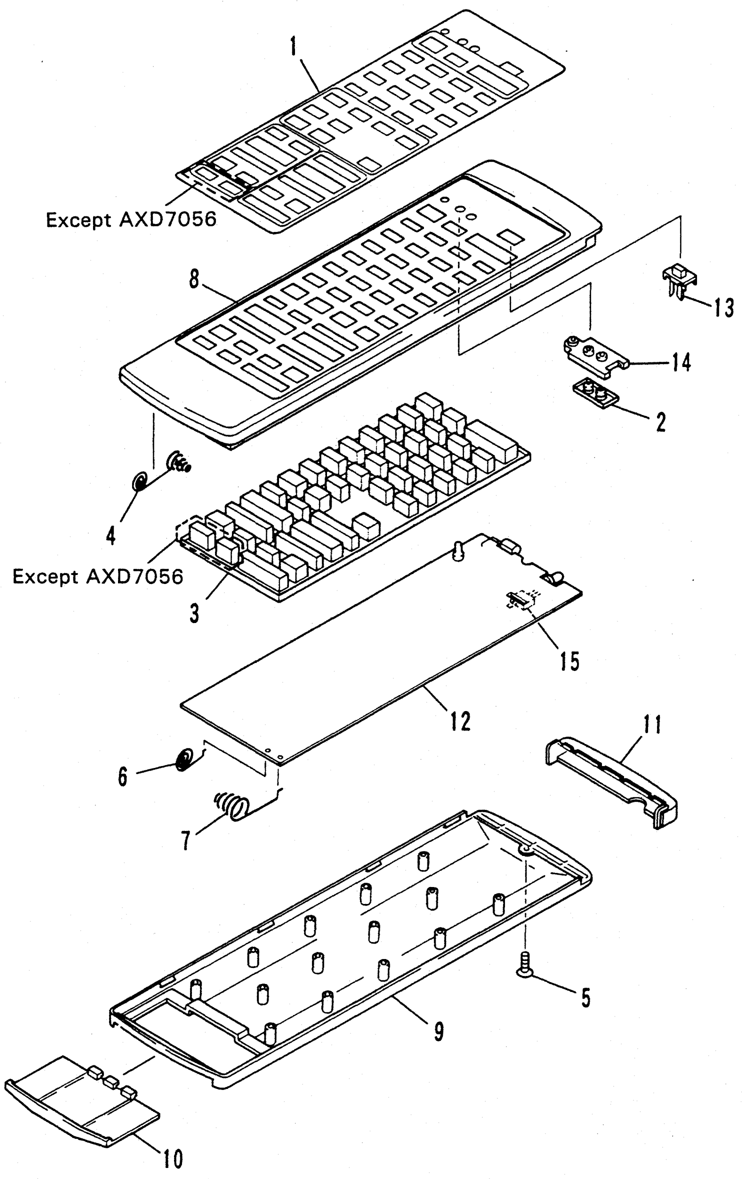
10.1 EXPLODED VIEW AND PARTS LIST

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

Parts List

Mark	No.	Description	Parts No.
	1	PLATE (For AXD7045)	AZA2005
	1	PLATE (For AXD7056)	AZA7099
	2	RUBBER SHEET (A) (S102)	AZA1985
	3	RUBBER SHEET (B) (S103) (For AXD7045)	AZA2006
	3	RUBBER SHEET (B) (S103) (For AXD7056)	AZA7098
	4	TERMINAL	AZB1334
	5	SCREW	AZB1335
	6	TERMINAL (A)	AZB1379
	7	TERMINAL (B)	AZB1380
	8	CASE (A)	AZN2254
	9	CASE (B)	AZN2255
	10	BATTERY COVER	AZN2256
	11	FILTER	AZN2257
NSP	12	P. C. BOARD	AZN2258
	13	KNOB (VIDEO/AUDIO)	AZN2259
	14	FRAME	AZN2260
	15	SLIDE SW (S101)	AZS1134



10.2 PCB PARTS LIST

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω → 56 × 10^1 → 561 .... RD1/8PM $\boxed{5}\,\boxed{6}\,\boxed{1}$ J
47kΩ → 47 × 10^3 → 473 .... RD1/4PS $\boxed{4}\,\boxed{7}\,\boxed{3}$ J
0.5Ω → 0R5 .... RN2H $\boxed{0}\,\boxed{R}\,\boxed{5}$ K
1Ω → 010 .... RS1P $\boxed{0}\,\boxed{1}\,\boxed{0}$ K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ → 562 × 10^1 → 5621 .... RM1/4PC $\boxed{5}\,\boxed{6}\,\boxed{2}\,\boxed{1}$ F

Mark	No.	Description	Parts No.
SEMICONDUCTORS			
	IC1	μ–COM	AZC1841
	IC2	IC	PST9121N
	Q1	CHIP TRANSISTOR	2SC3265
	D1	LED	SE303A–C
	D2	CHIP DIODE	RLS73
	D3	DIODE	SPS–503C–3
	D4, 5	CHIP DIODE	RLS73
	D6	LED	SLC–22VR
CAPACITORS			
	C1	ELECT. CAPACITOR	CEAS221M25
	C2	ELECT. CAPACITOR	CEAS101M10
	C3	ELECT. CAPACITOR	CEAS0R1M50
	C4, 5	CERAMIC CAPACITOR	CCDSL330J50
	C6	ELECT. CAPACITOR	CEAS101M10
	C7	CERAMIC CAPACITOR	CCDSL101J50
	C8	ELECT. CAPACITOR	CEAS0R1M50
RESISTORS			
	R1	CARBON FILM RESISTOR	RD1/4PM020J
		Other resistors	RD1/8PM□□□J
OTHERS			
	X1	RESONATOR	FCR4.0MC3

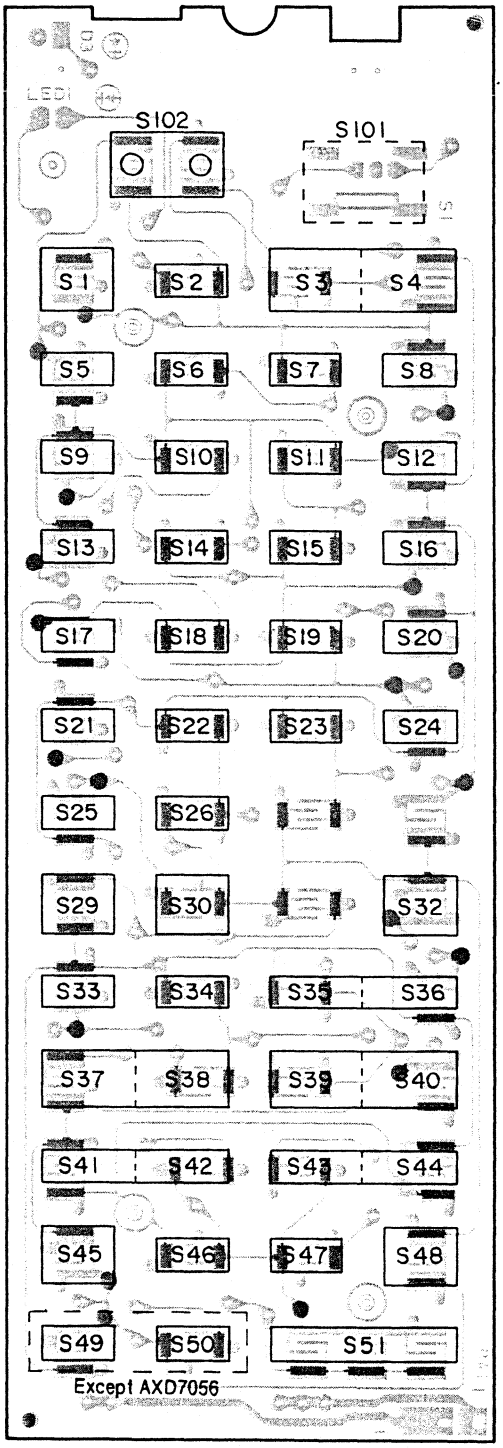
10.3 PCB PATTERN

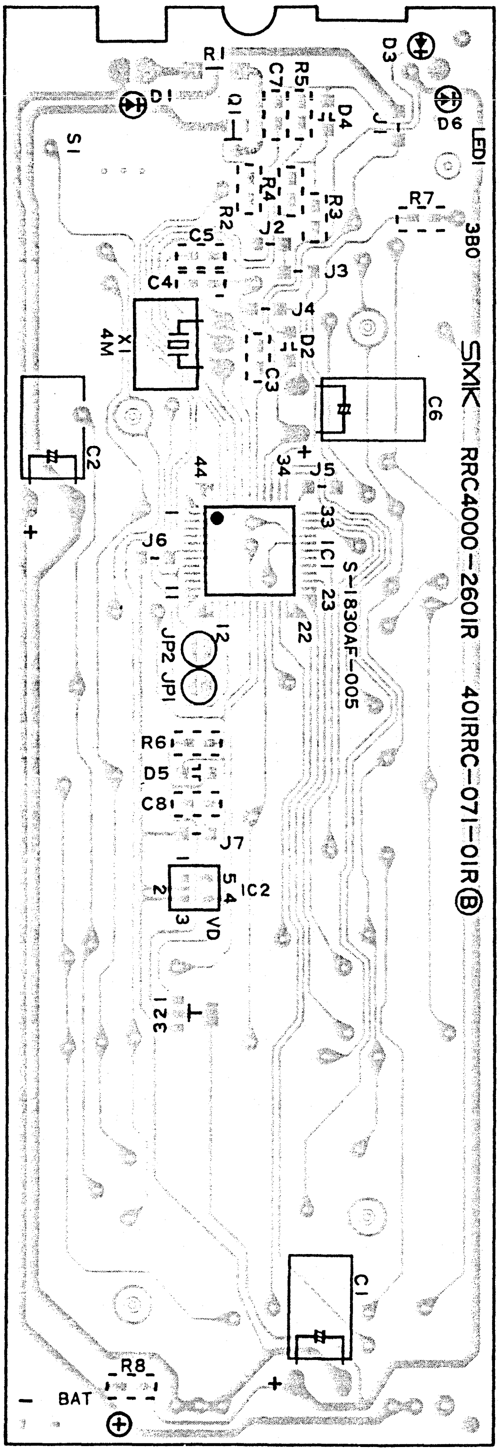
⬚ : Indicates a chip resistor.

⬚ : Indicates a chip capacitor.

⊣ : Indicates a chip transistor.

⊕ : Indicates a chip diode.


D3
LED1
S102
S101
S1
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
S12
S13
S14
S15
S16
S17
S18
S19
S20
S21
S22
S23
S24
S25
S26
S29
S30
S32
S33
S34
S35
S36
S37
S38
S39
S40
S41
S42
S43
S44
S45
S46
S47
S48
S49
S50
S51
Except AXD7056


R1
D3
D1
Q1
C7
R5
D4
J1
D6
LED1
S1
R4
R2
R3
R7
3B0
C5
J2
J3
C4
J4
X1
4M
D2
C3
SMK
C6
C2
+
44
34
J5
33
IC1
S-1830AF-005
23
22
1
11
12
J6
JP2
JP1
RRC4000-2601R
401RRC-071-01R Ⓑ
R6
D5
C8
J7
1
2
3
5
4
IC2
VD
3
2
1
C1
R8
+
−
BAT
⊕

10.4 SCHEMATIC DIAGRAM

NOTE

-▭- : Indicates a chip resistor.

-▮- : Indicates a chip capacitor.

▣ : Indicates a chip transistor.

-▶|- : Indicates a chip diode.

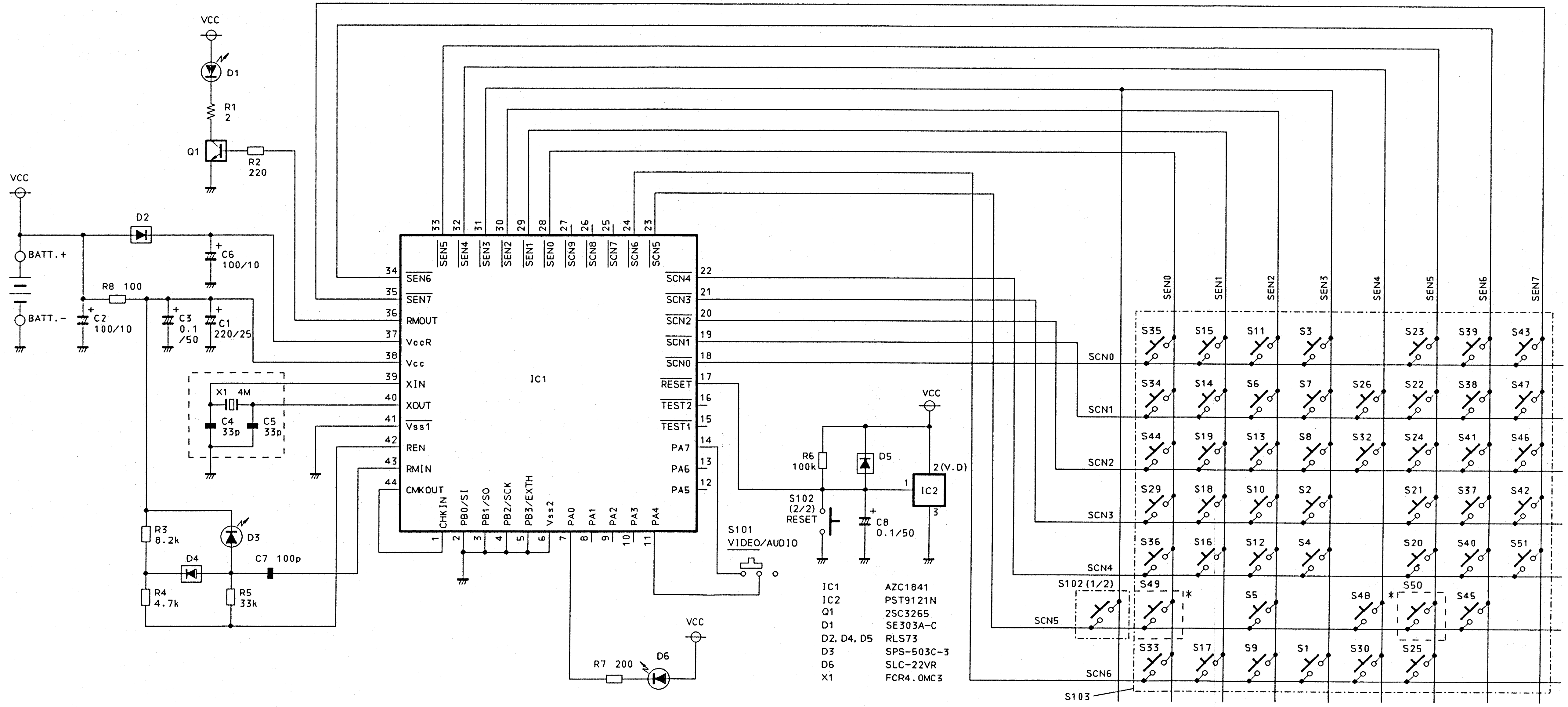
NOTE FOR SCHEMATIC DIAGRAMS (Type 2A)

1. **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**
2. **Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.**
3. **RESISTORS:**
   Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
   Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
   Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
4. **CAPACITORS:**
   Unit: p:pF or µF unless otherwise noted.
   Ratings: capacitor (µF)/ voltage (V) unless otherwise noted.
   Rated voltage: 50V except for electrolytic capacitors.
5. **COILS:**
   Unit: m:mH or µH unless otherwise noted.
6. **VOLTAGE AND CURRENT:**
   ▭ or ← V :
   DC voltage (V) at no input signal unless otherwise noted.
   ⇦ mA or ← mA :
   DC current at no input signal unless otherwise noted.
7. **OTHERS:**
   - ⊘ or ● : Adjusting point.
   - : Measurement point.
   - The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
8. **SCH−□ ON THE SCHEMATIC DIAGRAM:**
   - SCH−□ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)
9. **SWITCHES** (Underline indicates switch position):

S101: AUDIO/VIDEO
S102: LEARN·RESET
S1: RECEIVER POWER
S2: MUTING
S3: MUSTER VOLUME −
S4: MUSTER VOLUME +
S5: TV POWER
S6: 1
S7: 2
S8: 3
S9: BAND TV FUNC
S10: 4
S11: 5
S12: 6
S13: 0/10
S14: 7
S15: 8
S16: 9
S17: FREQUENCY TV VOLUME −
S18: FREQUENCY TV VOLUME +
S19: STATION TV CHANNEL −
S20: STATION TV CHANNEL +
TUNER/TV
S21: SURR MODE
S22: 3CH LOGIC
S23: TEST TONE
S24: CENTER MODE (DELAY TIME)
S25: CENTER LEVEL·REAR LEVEL −

S26: CENTER LEVEL·REAR LEVEL +
S29: FUNCTION
S30: TAPE2 MONITOR
S32: SLEEP RETURN
S33: DISC SELECT − (DISC SIDE A)
S34: DISC SELECT + (DISC SIDE B)
CD/LD
S35: DECK I (VCR CH −)
S36: DECK II (VCR CH +)
TAPE/VCR
S37: ■
S38: ▶
CD/LD
S39: ◀
S40: ▶
TAPE/VCR
S41: ⏮ (◀◀)
S42: ⏭ (▶▶)
CD/LD
S43: ◀◀
S44: ▶▶
TAPE/VCR
S45: POWER
S46: ❚❚
CD/LD
S47: ■
S48: POWER
TAPE/VCR
S49: ASC1
S50: ASC2
S51: TAPE SELECT TV/VCR

SCH-8


VCC
D1
R1 2
Q1
R2 220
VCC
D2
C6 100/10
BATT.+
BATT.−
R8 100
C2 100/10
C3 0.1 /50
C1 220/25
X1 4M
C4 33p
C5 33p
R3 8.2k
D3
D4
C7 100p
R4 4.7k
R5 33k
IC1
33 SEN5
32 SEN4
31 SEN3
30 SEN2
29 SEN1
28 SEN0
27 SCN9
26 SCN8
25 SCN7
24 SCN6
23 SCN5
34 SEN6
35 SEN7
36 RMOUT
37 VccR
38 Vcc
39 XIN
40 XOUT
41 Vss1
42 REN
43 RMIN
44 CMKOUT
1 CHKIN
2 PB0/SI
3 PB1/SO
4 PB2/SCK
5 PB3/EXTH
6 Vss2
7 PA0
8 PA1
9 PA2
10 PA3
11 PA4
22 SCN4
21 SCN3
20 SCN2
19 SCN1
18 SCN0
17 RESET
16 TEST2
15 TEST1
14 PA7
13 PA6
12 PA5
VCC
R6 100k
D5
IC2
1
2 (V.D)
3
S102 (2/2) RESET
C8 0.1/50
S101 VIDEO/AUDIO
VCC
R7 200
D6
SEN0
SEN1
SEN2
SEN3
SEN4
SEN5
SEN6
SEN7
SCN0
SCN1
SCN2
SCN3
SCN4
SCN5
SCN6
S102 (1/2)
S103
S35 S15 S11 S3 S23 S39 S43
S34 S14 S6 S7 S26 S22 S38 S47
S44 S19 S13 S8 S32 S24 S41 S46
S29 S18 S10 S2 S21 S37 S42
S36 S16 S12 S4 S20 S40 S51
S49 * S5 S48 * S50 S45
S33 S17 S9 S1 S30 S25

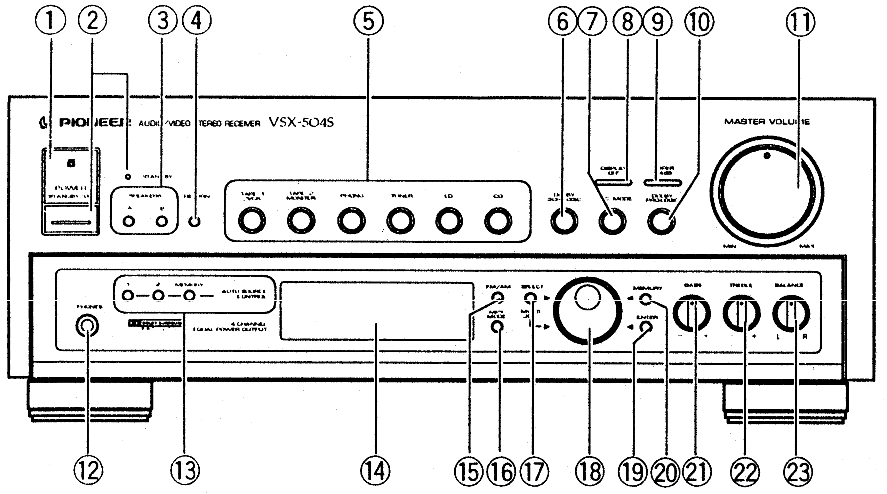
IC1	AZC1841
IC2	PST9121N
Q1	2SC3265
D1	SE303A-C
D2, D4, D5	RLS73
D3	SPS-503C-3
D6	SLC-22VR
X1	FCR4.0MC3

Note: * Except AXD7056

11. PANEL FACILITIES

FRONT PANEL FACILITIES (For VSX – 504S)

Illustration shows multi-voltage model.



① Remote sensor

② POWER STANDBY/ON switch

STANDBY indicator (Multi-voltage model only)

This is the switch for electric power.

ON : When set to the ON position, power is supplied and the unit becomes operational.

STANDBY: When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.

(Multi-voltage model only)
The STANDBY indicator lights when the power is set to STANDBY, and goes out when set to ON.

(Timer ON/OFF possible)
When the unit is switched ON, ON/OFF control can be performed by means of the optional timer.

NOTE:
When the power is initially turned ON, muting will be applied to prevent sound from being output for about 5 seconds.

③ SPEAKERS buttons (A,B)

ON/OFF switches for the A and B speaker systems.

④ RETURN button

Press this button to return the receiver to its initial state. TUNER is selected at this initial state. Adjust the sound level by using the MASTER VOLUME control.

TAPE 2 MONITOR .... OFF   MUTING .... OFF
SFC MODE .... OFF   FUNCTION .... TUNER
SUPER BASS .... OFF

And SPEAKERS buttons switch as follows.

Before pressing the RETURN button		After pressing
Both A and B are off	→	Only A is on
Only A is on	→	No change
Only B is on	→	Both A and B are on
Both A and B are on	→	No change

NOTE:
Press the RETURN button, and the frequency last selected is received. If reception of the frequency last selected is not possible, the mode automatically switches to AUTO TUNING.

⑤ Input selector buttons

TAPE 1/VCR
: Press when performing playback on a VCR unit or cassette deck.

TAPE 2 MONITOR
: Press when performing playback on a second cassette deck and when monitoring recording.

PHONO : Press when playing records on a turntable.
TUNER : Press when listening to radio broadcasts.
LD : Press when performing playback on an LD player.
CD : Press when playing compact discs on a CD player.

⑥ DOLBY 3CH LOGIC button

Select this setting when stereo-source regeneration and rear speakers are not connected and you wish to use the front L, front R, and center speakers to enjoy audio/visual material bearing the DD DOLBY SURROUND mark.

⑦ SFC MODE button

Each time you press it, the mode and the display indications change as follows.

→ STUDIO → SIMULATED SURROUND
off ← ARENA ←

⑧ DISPLAY OFF button

This switches the display OFF.

⑨ SUPER BASS button

Press this button when you want to boost the bass.

⑩ DOLBY PRO-LOGIC button

Switches DOLBY PRO-LOGIC SURROUND on and off.

⑪ MASTER VOLUME control

Use it to simultaneously adjust the sound volume from the front, center, and rear speakers.

⑫ PHONES jack

Connect the plug on your headphones to this jack. Set SPEAKERS A and B switches to OFF if you want to cut the sound from the speakers and listen to it only through the headphones.

⑬ AUTO SOURCE CONTROL buttons

1, 2 buttons:
These buttons are for memorizing and recalling your current settings. Both 1 and 2 can be used to memorize settings. If you connect another component, such as a CD player, to the CONTROL OUT jack on the rear panel, the signals to switch power on and start play are also transmitted.

MEMORY:
Use when memorizing settings to a 1, 2 button.

⑭ Display section

⑮ FM/AM button

Use this to switch between FM and AM frequency band reception.

⑯ MPX MODE button

Use to select the auto stereo mode or monaural mode when listening to FM broadcasts. The monaural mode has been selected when the MONO indicator in the display section is lit.

Auto stereo mode
Normally, leave in this mode for reception. When a stereo FM broadcast is received, it will be automatically reproduced in stereo.

Monaural mode
When receiving distant stations or stations with weak broadcast signals, the input signal may be weak, thus resulting in increased noise during FM stereo broadcasts. In this event, setting the receiver to the monaural mode will reduce the noise. In this case, however, FM stereo broadcasts will be reproduced in monaural sound.

NOTE:
This button has no effect on reception of AM broadcasts.

⑰ SELECT button

Press this button to switch to the station mode. Then you can turn the MULTI-JOG to select a station.
When in the Frequency mode, tuning the MULTI-JOG raises or lowers the frequency.

⑱ MULTI-JOG

Use during tuner operation to select frequencies and station numbers.

⑲ ENTER button

Press this button when you are in the frequency preset mode, and the displayed frequency is memorized in the selected station. (Station indications stop flashing and stay lit.)

⑳ MEMORY button

Press this button to switch to the frequency preset mode.

㉑ BASS control

Use to adjust the low-frequency level. Turn clockwise to boost bass, and counterclockwise to attenuate bass.

㉒ TREBLE control

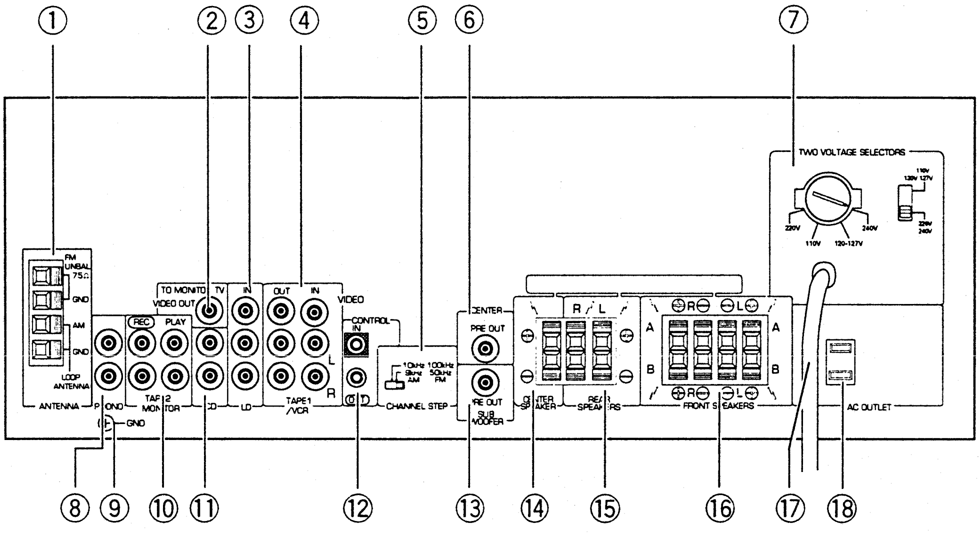
Use to adjust the high-frequency level. Turn clockwise to boost treble, and counterclockwise to attenuate treble.

㉓ BALANCE control

Use to adjust the sound volume balance between left and right speakers.
L: Decreases the sound on the right side.
R: Decreases the sound on the left side.
Usually, left and right volume levels should be the same.

REAR PANEL FACILITIES (For VSX−504S)

Illustration shows Multi-voltage model.


①
②
③
④
⑤
⑥
⑦
TWO VOLTAGE SELECTORS
110V
120V 127V
220V
240V
120-127V
FM UNBAL 75Ω
GND
AM
GND
LOOP ANTENNA
ANTENNA
TO MONITOR TV
VIDEO OUT
IN
OUT
IN
VIDEO
REC
PLAY
CONTROL
IN
L
R
PHONO
GND
TAPE 2 MONITOR
CD
LD
TAPE1 /VCR
CHANNEL STEP
10kHz 100kHz
9kHz 50kHz
AM FM
CENTER
PRE OUT
PRE OUT SUB WOOFER
CENTER SPEAKER
R / L
REAR SPEAKERS
A
B
⊕R⊖ ⊖L⊕
FRONT SPEAKERS
AC OUTLET
⑧
⑨
⑩
⑪
⑫
⑬
⑭
⑮
⑯
⑰
⑱

① FM/AM ANTENNA terminals

Use these antenna terminals for reception of normal FM and AM broadcasts.

② VIDEO OUT (TO MONITOR TV) jack

Connect to a monitor TV or to TV sets with video input terminals to watch program materials from a VCR or LD player connected to this unit.

③ LD input jacks

Connect to an LD player's output jacks (audio, video).

④ TAPE 1/VCR jacks

Connect to the first cassette deck or a VCR. With a VCR, also connect the video jacks.

⑤ CHANNEL STEP switch (Multi-voltage model only)

⑥ CENTER PRE OUT jack

When a separate power amplifier is used to drive the surround center speaker, connect the power amplifier to this jack.

⑦ TWO VOLTAGE SELECTORS switches (Multi-voltage model only)

⑧ PHONO input jacks

Connect to the output cables from a turntable.

⑨ GND terminal

Connect the turntable ground lead to this terminal.

⑩ TAPE 2 MONITOR jacks

Connect to audio components such as a second cassette deck or a graphic equalizer.

⑪ CD input jacks

Connect to the output jacks of a compact disc player.

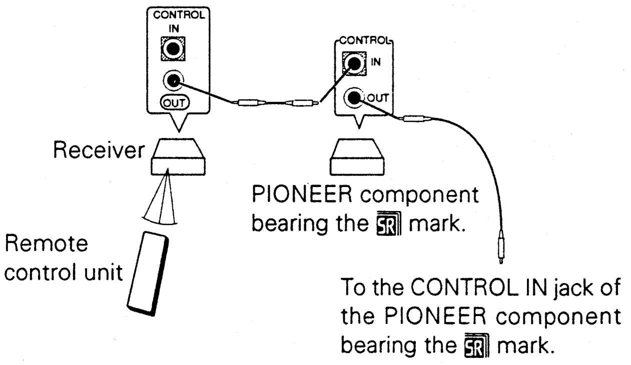
⑫ CONTROL IN/OUT jacks

IN :Connect this jack to other Pioneer components when using those components to control this unit.

OUT :Connect this jack to other Pioneer components when using the remote control of this unit to control the other components.

NOTE :

The receiver's remote sensor does not function when a plug is inserted in the IN jack. To operate, point the remote control unit at the remote sensor on the component to which the receiver's IN jack is connected.


CONTROL
IN
OUT
CONTROL
IN
OUT
Receiver
PIONEER component bearing the SR mark.
Remote control unit
To the CONTROL IN jack of the PIONEER component bearing the SR mark.

⑬ SUB WOOFER PRE OUT jack

If you want to boost the low frequencies, connect to a subwoofer power amplifier.

⑭ CENTER SPEAKER terminals

Connect the center speaker to these terminals.

NOTE :

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctions or breakdowns may occur when conductors come into contact with each other. Use a center speaker with an impedance of 8 Ω to 16 Ω.

⑮ REAR SPEAKERS terminals

Connect the rear speakers to these terminals.

NOTES:

- *Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctions or breakdowns may occur when conductors come into contact with each other. Use rear speakers with an impedance of 8 Ω to 16 Ω.*
- *Be sure to connect two speakers (L, R). There will be no sound if only one speaker is connected.*

⑯ FRONT SPEAKERS terminals

A :Connect to the first set of speakers.
B :Connect to the second set of speakers.

NOTE:

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctions or breakdowns may occur when conductors come into contact with each other. Use front speakers with an impedance of 8 Ω to 16 Ω .

⑰ Power cord

⑱ AC OUTLET

(U.S. and Canadian models)
〔SWITCHED 100 W (0.8 A) MAX〕
Power supplied through this outlet is turned on and off by the receiver's POWER switch. Total electrical power consumption of connected equipment should not exceed 100 W (0.8 A).

(Multi-voltage model)
〔SWITCHED 100 W MAX〕
Power supplied through this outlet is turned on and off by the receiver's POWER switch. Total electrical power consumption of connected equipment should not exceed 100 W .

NOTES:

- *This unit should be disconnected by removing the power plug from the wall socket when not in regular use, e.g. when on vacation.*
- *Do not connect appliances with high power consumption such as heaters, irons, or television sets to this AC OUTLET in order to avoid overheating and fire risk. This can cause the receiver to malfunction.*

CAUTION:
DO NOT CONNECT MONITOR OR TV SET.

12. SPECIFICATIONS

For VSX－504S

Amplifier Section

Continuous average power output of 150 watts* per channel, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.09 % total harmonic distortion (front).**

[Multi-voltage model only]	
Continuous Power Output (DIN)	
Front (1kHz, T.H.D. 1%, 8 Ω)	165 W+165 W
Continuous Power Output	
Front	110 W + 110 W (1kHz, 0.8%, 8 Ω)
Center	110 W (1kHz, 0.8%, 8 Ω)
Rear	110W (1kHz, 0.8%, 8 Ω)
Dynamic Power (2 Ω /4 Ω/8 Ω)	350 W/280 W/180 W
Input (Sensitivity/Impedance)	
PHONO MM	2.8 mV/47 kΩ
CD, TAPE 1/VCR, TAPE 2, LD	200 mV/47 kΩ
Phono Overload Level (T.H.D. 0.1%, 1 kHz)	
PHONO MM	100 mV
Frequency Response	
PHONO MM	20 Hz to 20,000 Hz ± 0.3 dB
CD, TAPE 1/VCR, TAPE 2, LD	5 Hz to 100,000 Hz $^{+0}_{-3}$dB
Output (Level/Impedance)	
TAPE 1/VCR REC, TAPE 2 REC	200 mV/2.2 kΩ
Tone Control	
BASS	± 8 dB (150 Hz)
TREBLE	± 8 dB (10 kHz)
SUPER BASS	+8 dB (80 Hz)
Signal-to-Noise Ratio (IHF, short circuited, A network)	
PHONO MM	76 dB
CD, TAPE 1/VCR, TAPE 2, LD	97 dB
Signal-to-Noise Ratio [EIA, at 1 W (1 kHz)]	
PHONO MM	77 dB
CD, TAPE 1/VCR, TAPE 2, LD	80 dB

* *Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifiers.*

** *Measured by Audio Spectrum Analyzer.*

VIDEO Section

Input (Sensitivity/Impedance)	
VCR, LD	1 Vp-p/75 Ω
Output (Level/Impedance)	
VCR REC	1 Vp-p/75 Ω
Frequency Response	
VCR, LD→ MONITOR	5 Hz to 7 MHz $^{+0}_{-3}$dB
Signal-to-Noise Ratio	55 dB
Cross Talk	55 dB

FM Tuner Section

Frequency Range	87.5 MHz to 108 MHz
Usable Sensitivity	Mono:11.2 dBf, IHF (1.0 μV/75 Ω)
50 dB Quieting Sensitivity	Mono: 16.8 dBf Stereo: 38.6 dBf
Signal-to-Noise Ratio	Mono: 73 dB (at 85 dBf) Stereo: 70 dB (at 85 dBf)
Distortion	Stereo: 0.5 % (1 kHz)
Alternate Channel Selectivity	60 dB (400 kHz)
Stereo Separation	40 dB (1 kHz)
Frequency Response	30 Hz to 15 kHz (± 1) dB
Antenna Input	75 Ω unbalanced

AM Tuner Section

Frequency Range	531 kHz to 1,602 kHz (9 kHz step) 530 kHz to 1,700 kHz (10 kHz step)
Sensitivity (IHF, Loop antenna)	350 μV/m
Selectivity	25 dB
Signal-to-Noise Ratio	50 dB
Antenna	Loop antenna

Miscellaneous

Power Requirements	
U.S. and Canadian models	AC 120 V, 60 Hz
Multi-voltage model	AC 110 V/120-127 V/220 V/240 V (Switchable), 50/60 Hz
Power Consumption	
U.S. and Canadian models	340W, 500VA
Multi-voltage model	905 W
In Standby Condition	3W
AC Outlets	
U.S. and Canadian models	
SWITCHED	100 W (0.8 A) MAX
Multi-voltage model	
SWITCHED	100 W MAX
Dimensions	420 (W) × 155 (H) × 300 (D) mm 16-9/16 (W) × 6-1/8 (H) × 11-13/16 (D) in
Weight (without package)	9.5 kg (20 lb 15 oz)

Furnished Parts

FM Antenna	1
AM Loop Antenna	1
Dry Cell Batteries [size "AAA" (IEC LR03/AM-4)]	2
Remote Control Unit	1
Operating Instructions	1

NOTE:

Specifications and the design are subject to possible modifications without notice, due to improvements.